



# FINAL YEAR PROJECTS

BE, ME, B. TECH, M. TECH,  
MCA, BCA, B.SC, MBA

## IEEE PROJECTS

**ELECTRICAL PROJECTS 2023-24**

**Igeeks Technologies** can offer complete project support and assistance to engineering students. With an extensive library of projects successfully completed by our electrical engineering professionals, we can inspire new ideas for electrical engineering projects for engineering students. If you are already in the middle of your project, but you are facing implementation problems, our professional can immediately step in and solve them for you. For electrical engineering students short on time and resources, our electrical engineers can design, build, successfully implement a project, and deliver it to you within a given time frame. If you still don't have an idea for your electrical engineering projects, you can check out our list of projects for electrical engineering students below for more ideas.

No electrical and electronic equipment is possible without the expertise of an electrical engineer. They design the power supply, implement the electrical and electronic components and make sure everything works as expected. There is hardly any branch of engineering that does not depend on electrical and electronic systems, and this makes an electrical engineer the most sought-after engineer in the world. With the right training, hands-on exposure and practice, every electrical engineering student becomes an electrical engineering professional with a promising career, and electrical engineering projects during graduation and post-graduation play a key role in making this possible.

## **Projects for Electrical Engineering Students**

Being a highly technical subject with mathematical rigor, electrical engineering is one of those engineering fields where practical exposure is paramount for solid understanding. Choosing the right electrical engineering project that matches

their area of interest can do wonders for their technical acumen and understanding of electrical engineering. However, just like theory, making a solid electrical project with practical application is challenging and naturally requires professional help. The difficulties begin with choosing the right wiring with sufficient practical range. Resource planning, design and successful execution is a long and arduous process that may not be possible without expert guidance from professional project consulting companies like Igeeks Technologies.

## ELECTRICAL PROJECT LIST 2023-2024

IEEE LATEST PROJECTS BASED ON ELECTRICALS AND ELECTRONICS (EEE)	
<b>E001</b>	494_AUTOMATIC POWER FACTOR CONTROL
<b>E002</b>	471_ANDROID-GREENCHARGE MANAGING RENEWABLE ENERGY IN SMART BUILDINGS
<b>E003</b>	485_ALTERNATE ENERGY FROM BUSY ROAD FOR DEVELOPMENT OF SMART CITY - THERMAL & PIEZO
<b>E004</b>	484_IOT - RESIDENCE ENERGY CONTROL SYSTEM BASED ON WIRELESS SMART SOCKET AND IOT
<b>E005</b>	321_BIRD - SOLAR POWERED IRRIGATION WITH AUTO CONTROL OF PUMP & SMS ALERT
<b>E006</b>	471_GREENCHARGE MANAGING RENEWABLE ENERGY IN SMART BUILDINGS
<b>E007</b>	240_WIRELESS POWER THEFT, OVERVOLTAGE AND OVERLOAD MONITORING SYSTEM
<b>E008</b>	479_WIRELESS POWER THEFT, OVERVOLTAGE AND OVERLOAD MONITORING SYSTEM AND GEYSER AUTOMATION
<b>E009</b>	466_GSM BASED CONTROL UNIT FOR A NOVEL RECONFIGURABLE MICRO GRID ARCHITECTURE WITH RENEWABLE ENERGY SOURCES
<b>E010</b>	ZERO LABOUR - WET WASTE CRUSHER
<b>E011</b>	AN APPROACH BASED ON A ROBOTICS OPERATION SYSTEM FOR THE IMPLEMENTATION OF INTEGRATED INTELLIGENT HOUSE SERVICES SYSTEM
<b>E012</b>	STATE OF ART ON POSSIBILITY & OPTIMIZATION OF SOLAR PV-WIND HYBRID SYSTEM
<b>E013</b>	499_ISLAND - GRID CONNECTED DC DISTRIBUTED GENERATION
<b>E014</b>	228_IOT-HIVE HOME AUTOMATION SYSTEM FOR INTRUSION DETECTION
<b>E015</b>	347_IOT BASED REFRIGERATOR, STORAGE ROOM AND FMCG PRODUCTS STOCK MONITORING WITH EMAIL ALERT OF PURCHASE ORDER
<b>E016</b>	87_BLUETOOTH EMBEDDED ROBOTIC AGRICULTURE PLOWING, SEEDING AND GRASS CUTTING POWERED BY SOLAR ENERGY
<b>E017</b>	518_FARMER FRIENDLY SOLAR BASED VIRTUAL FENCING FOR RURAL AGRICULTURE WITH BATTERY REVERSE CHARGE PROTECTION
<b>E018</b>	479_IOT BASED SMART GEYSER AUTOMATION WRT ENVIRONMENT CONDITION TO SAVE ELECTRICITY

<b>E019</b>	356_ROTATING SOLAR SYSTEM FOR AUTOMOBILES WITH BOOST & CHARGE CONTROL
<b>E020</b>	427_ELECTRIC LINEMAN PROTECTION USING USER CHANGEABLE PASSWORD BASED CIRCUIT BREAKER
<b>E021</b>	429_SUBSTATION PHASE CONTROLLER FOR AUTOMATIC LOAD SHEDDING WITH OVERLOAD ALERT
<b>E022</b>	431_IOT BASED UNDERGROUND CABLE FAULT DETECTION
<b>E023</b>	431_UNDERGROUND CABLE FAULT DETECTION AND ALERT WITH VOICE COMMANDS USING FN-M16P.
<b>E024</b>	319_RENESAS BASED RENEWABLE ENERGY - 12V DC POWER GENERATION USING BACK EMF & SOLAR FOR LED LOAD
<b>E025</b>	315_SOLAR POWERED HOUSE AND TRANSMITTING THE EXTRA POWER TO THE GOVERNMENT MAINS
<b>E026</b>	55_SMART POWER GENERATION BY 2-AXIS CONTROLLED SOLAR PANEL AND POWER OPTIMIZATION
<b>E027</b>	482_EC SHUB - AN OFF GRID BUNK
<b>E028</b>	169_TWO AXIS BASED SOLAR TRACKING FOR POWER CONSERVATION IN IRRIGATION SYSTEM
<b>E029</b>	445_AUTOMATIC TRANSFORMER LOAD SHARING SYSTEM WITH SMS ALTERING
<b>E030</b>	445_GSM BASED POWER SHARING OF TRANSFORMER WITH AUTOMATIC LOAD SHEDDING SYSTEM
<b>E031</b>	321_IOT BASED IRRIGATION SYSTEM WITH WITHOUT INTERNET AND PUMP SET CONTROL WITH STATUS NOTIFICATION
<b>E032</b>	333_IOT - WEB LABORATORY- REMOTE VIRTUAL LAB ACCESS WITH GRAPH GENERATION.
<b>E033</b>	503_RECOS - SMART SOCKET FOR ELECTRIC VEHICLE, WASHING MACHINE, GEYSER ENERGY CONTROL
<b>E034</b>	504_SWACHH ABHIYAN - DOOR-TO-DOOR PICKUP OF HOUSEHOLD HAZARDOUS WASTE
<b>E035</b>	POWER TRANSMISSION LINE FAILURE DETECTION
<b>E036</b>	514_IEEE EFFICIENCY IMPROVEMENT OF PHOTOVOLTAIC PANELS BY DESIGN IMPROVEMENT OF COOLING SYSTEM USING WATER COOLER

## EE IEEE LATEST PROJECTS BASED ON ELECTRICALS AND ELECTRONICS (EEE)

<b>IEE001</b>	PREPAID ELECTRICITY BILLING AUTOMATION
<b>IEE002</b>	POST PAID ELECTRICITY SYSTEM AUTOMATION WITH CARD & CARD READER
<b>IEE003</b>	MANAGEMENT OF SUB-TRANSMISSION AND DISTRIBUTION SYSTEM IN POWER SYSTEM USING IOT
<b>IEE004</b>	IMPLEMENTATION OF SOLAR POWER AUTOMATIC BATTERY CHARGING SYSTEM FOR ELECTRIC VEHICLE USING IOT
<b>IEE005</b>	SOLAR TRACKING AND H- DARRIUS WIND TURBINE
<b>IEE006</b>	DATA ACQUISITION FOR ELECTRICAL VEHICLE POWER SYSTEM AUTOMATION USING IOT
<b>IEE007</b>	DESIGN AND EXPERIMENTAL ANALYSIS OF PFC RECTIFIERS FOR DOMESTIC INDUCTION HEATING APPLICATIONS

<b>IEE008</b>	SOLAR BASED DESIGN AND DEVELOPMENT OF PESTICIDE SPRAYER FOR USE IN AGRICULTURE FIELDS USING IOT AND BLUE TOOTH TECHNOLOGY
<b>IEE009</b>	ANALYSIS AND SIMULATION OF FLYING CAPACITOR MULTILEVEL INVERTER USING PD PWM STRATEGY
<b>IEE010</b>	DESIGN AND FABRICATION OF AUTOMATED SMART SOLAR GRASS CUTTER ROBOT USING WIFI AND GPS TECHNOLOGY
<b>IEE011</b>	HIGH GAIN STEP UP DC-DC CONVERTER FOR DC MICRO-GRID APPLICATION
<b>IEE012</b>	IMPLEMENTATION OF HYBRID POWER SOURCE INVERTER
<b>IEE013</b>	IMPLEMENTATION OF HYBRID POWER SOURCE USING IOT
<b>IEE014</b>	DESIGN,ANALYSIS ANDIMPLEMENTATION OF NOVEL SOFT SWITCHED BRIDGELESS INTER LEAVED BOOST PFC CONVERTOR
<b>IEE015</b>	DESIGN AND DEVELOPMENT OF HYBRID INVERTER FOR RENEWABLE SOURCE APPLICATION
<b>IEE016</b>	NATURE INSPIRED SOLAR POWER USING IOT
<b>IEE017</b>	PORTABLE INTENSIVE CARE UNIT EQUIPMENT USING IOT
<b>IEE018</b>	7 LEVEL INVERTER
<b>IEE019</b>	TRANSFORMER LESS INVERTER
<b>IEE020</b>	SOLAR BASED VARIABLE FREQUENCY DRIVE
<b>IEE021</b>	HIGHWAY WINDMILL MONITORING AND CONTROLLING USING IOT
<b>IEE022</b>	HIGHWAY MULTI SYSTEM ( WINDMILL / SOLAR )MONITORING AND CONTROLLING USING IOT
<b>IEE023</b>	IMPLEMENTATION OF STARTING AND ADVANCED PROTECTION FOR INDUCTION MOTOR
<b>IEE024</b>	POWER FACTOR CORRECTION GSM METER
<b>IEE025</b>	DESALINATION OF SEA WATER USING HYBRID POWER SOURCE
<b>IEE026</b>	ANTENNAS AND PHOTOVOLTAIC PANELS: TOWARD A GREEN COMMUNICATION MICROWAVE STATION
<b>IEE027</b>	AUTOMATIC COIN BASED CELL PHONE CHARGER WITH DUAL SOLAR TRACKING SYSTEM
<b>IEE028</b>	TRANSMISSION LINE MULTIPLE FAULTS DETECTION AND INDICATION TO ELECTRICITY BOARD
<b>IEE029</b>	DATA ACQUISITION AND MONITORING OF SOLAR PANELS USING 2-CHANNEL DATA LOGGER AND .NET APPLICATION
<b>IEE030</b>	A BUCK-BOOST INTEGRATED FULL BRIDGE INVERTER FOR SOLAR PHOTOVOLTAIC BASED STANDALONE SYSTEM
<b>IEE031</b>	A NOVEL METHOD TO EXTRACT MAXIMUM POWER FROM SOLAR PANEL OF A GRID CONNECTED PHOTOVOLTAIC SYSTEM USING PHASE ANGLE CONTROL AND HYSTERSIS CURRENT CONTROL
<b>IEE032</b>	HIGH-EFFICIENCY DC-DC CONVERTER FOR LARGE INPUT-VOLTAGE FLUCTUATIONS IN SOLAR APPLICATIONS
<b>IEE033</b>	IMPLEMENTATION OF A WEB OF THINGS BASED SMART GRID TO REMOTELY MONITOR AND CONTROL RENEWABLE ENERGY SOURCES
<b>IEE034</b>	ENERBEE-EXAMPLE OF AN ADVANCED METERING INFRASTRUCTURE BASED ON ZIGBEE
<b>IEE035</b>	REAL-TIME DETECTION SYSTEM FOR ELECTRICAL DISTURBANCES FOR REMOTE COMMUNICATION STATIONS AND SMART GRID
<b>IEE036</b>	POWER FACTOR METERING SYSTEM USING ARDUINO
<b>IEE037</b>	WIRELESS RESIDENTAL POWER MONITORING SYSTEM

<b>IEE038</b>	USING ARDUINO DEVELOPMENT PLATFORM IN THE DIAGNOSIS OF AC ELECTRICAL MACHINES
<b>IEE039</b>	BATTERY MANAGEMENT SYSTEM USING ARDUINO
<b>IEE040</b>	ASYMMETRICAL TWO-PHASE INDUCTION MOTOR SPEED CONTROLLED BY MULTILEVEL INVERTER EMPLOYING CASCADED TRANSFORMERS
<b>IEE041</b>	DESIGN AND IMPLEMENTATION OF REAL TIME TRANSFORMER HEALTH MONITORING SYSTEM USING GSM TECHNOLOGY

<b>IEE042</b>	DEVELOPMENT OF EFFICIENT POWER GENERATION USING AUTOMATED RENEWABLE SOURCES AND AUTOMATING STREET LIGHTS ACCORDING TO TRAFFIC DENSITY
<b>IEE043</b>	SOLAR TRACKING SYSTEM WITH AUTOMATIC PANEL CLEANING MECHANISM FOR EFFICIENT POWER GENERATION
<b>IEE044</b>	UNIVERSAL ELECTRICAL POWER GENERATION AND MULTIPURPOSE OPTIMIZATION- SOLAR,WIND AND RAIN
<b>IEE045</b>	TALKING ENERGY METER
<b>IEE046</b>	IMPLEMENTATION OF CUK CONVERTER WITH MPPT

## EEE POWER SYSTEMS IEEE TITLES – SOLAR POWER GENERATION DOMAIN

TITLE ID	TITLE
TEMAPE209,TEMAPE210, TEMAPS589, TEPGPS552, TEPGPE181,TEPGPE182	TWO-STAGE CONVERTER STANDALONE PV-BATTERY SYSTEM BASED ON VSG CONTROL  Objective: The main objective of this project is to adjust the inverter output and realize the maximum power of the PV scheme by using VSG controller.
TEMAPS577, TEMAPE204, TEPGPS540,TEPGPE176	A NOVEL AND HIGH-GAIN SWITCHED-CAPACITOR AND SWITCHED-INDUCTOR-BASED DC/DC BOOST CONVERTER WITH LOW INPUT CURRENT RIPPLE AND MITIGATED VOLTAGE STRESSES  Objective: The main objective of this project is to obtain low input current ripples and mitigate the voltage stresses.
TEMAPS579,TEMAPE206, TEMAPE207,TEPGPE178, TEPGPE179,TEPGPS542	SOLAR POWER GENERATION SYSTEM WITH POWER SMOOTHING FUNCTION  Objective: The main objective of this project is to increase power efficiency and smoothens power fluctuations in the Solar Power generation system.
TEMAPS590,TEMAPS591 TEPGPS553,TEPGPS554	FASTER CONVERGENCE CONTROLLER WITH DISTORTED GRID CONDITIONS FOR PHOTOVOLTAIC GRID FOLLOWING INVERTER SYSTEM  Objective: The main objective of this project is to improve power quality and achieve zero steady state error by using MDBHCC with PR controller.

TEMAPS565, TEMAED147, TEPGPS530, TEPGED141, TEMAPS583, TEMACS61, TEPGPS546, TEPGCS55	ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM Objective: The main objective of this project is comprehensive dynamic analysis for a renewable energy based water pumping system.
TEMAPS580, TEMAPS581, TEMAPS582, TEPGPS543, TEPGPS544, TEPGPS545	THREE-LEVEL T-TYPE QUASI-Z SOURCE PV GRID-TIED INVERTER WITH ACTIVE POWER FILTER FUNCTIONALITY UNDER DISTORTED GRID VOLTAGE Objective: The main objective of this project is to provide the stability and good dynamic response of the grid-connected 3L-T-type qzsi.
TEMAPS614, TEMAPE223, TEPGPS577, TEPGPE195	A GENERALIZED HIGH GAIN MULTILEVEL INVERTER FOR SMALL SCALE SOLAR PHOTOVOLTAIC APPLICATIONS Objective: The main objective of this project is to increase the low voltage levels of PV panels by using high gain dc-dc converters, which are also known as front-end converters.
TEMAED88, TEMAPS453	SOLAR POWERED UNMANNED AERIAL VEHICLE WITH ACTIVE OUTPUT FILTER UNDER NON-LINEAR LOAD CONDITIONS Objective: The objective of this paper is to propose Active Output Filter system AOF reduces the size and weight of the power transmission system while significantly improving its conversion efficiency.
TEPGPS421, TEMAPS447	FUZZY LOGIC CONTROL FOR SOLAR PV FED MODULAR MULTILEVEL INVERTER TOWARDS MARINE WATER PUMPING APPLICATIONS. Objective: The main objective of this project aims to control the Induction Motor (IM) drive using intelligent techniques towards marine water pumping applications.

TEPGPS443, TEPGPS444, TEMAPS473, TEMAPS474	IMPLEMENTATION OF FREQUENCY INTEGRATED MULTI-ORDER GENERALIZED INTEGRATOR FOR SOLAR ENERGY SOURCED GRID Objective: The main objective of this project is to attenuate the higher-order and sub-order harmonic components from distorted load currents, even when the load currents are linear or nonlinear and balanced or unbalanced.
TEMAPS468	PV BASED SHUNT ACTIVE HARMONIC FILTER FOR POWER QUALITY IMPROVEMENT Objective: The main objective of this project is to SAHF system provides harmonic mitigation, power factor correction, and load compensation.
TEMAPS575, TEPGPS538	SIMULATION AND MODELLING OF MPPT BASED PV SYSTEM CONNECTED WITH BOOST CONVERTER Objective: The main objective of this project is to obtain supreme required amount of power from solar PV panel.

TEPGPS433, TEMAPS459	PARTIAL POWER CONVERSION AND HIGH VOLTAGE RIDE-THROUGH SCHEME FOR A PV-BATTERY BASED MULTI-PORT MULTI-BUS POWER ROUTER. Objective: The main objective of this project is to partial power conversation and high voltage ride through for PV-battery energy storage system.
TEPGPS420, TEMAPS446	INERTIA AND DAMPING ANALYSIS OF GRID-TIED PHOTOVOLTAIC POWER GENERATION SYSTEM WITH DC VOLTAGE DROOP CONTROL. Objective: Main objective of this project aims to analyze the inertia, damping and synchronization characteristics of the Grid-Tied Photovoltaic Power Generation System with DC Voltage Droop Control.
TEPGPS440, TEMAPS466	CONTROL OF PHOTOVOLTAIC INVERTERS FOR TRANSIENT AND VOLTAGE STABILITY ENHANCEMENT. Objective: The main objective of this project is to, improve the transient stability and enhance the voltage stability of solar PV system.
TEPGPE158,TEMAPE185, TEMAPS536,TEPGPS501, TEMAPS509,TEPGPS474	MULTI-MODE OPERATION AND CONTROL OF A Z-SOURCE VIRTUAL SYNCHRONOUS GENERATOR IN PV SYSTEMS Objective: The main objective of this project is to improve the stability and track the frequency of the Power Electronic Converters.
TEPGPS472	PEAK CURRENT DETECTION STARTING BASED POSITION SENSOR LESS CONTROL OF BLDC MOTOR DRIVE FOR PV ARRAY FED IRRIGATION PUMP. Objective: The main objective of this project is to start the permanent magnet brushless direct current (PMBLDC) motor with exact commutation using position sensor less control mode.
TEMAPS546, TEMAPS547, TEPGPS513, TEPGPS512	MINIMIZING ENERGY STORAGE UTILIZATION IN A STAND-ALONE DC MICROGRID USING PHOTOVOLTAIC FLEXIBLE POWER CONTROL Objective: The main objective of this project is to regulate the DC link voltage of both BESS and PV system.
TEMAPS477 TEPGPS447	FRACTIONAL ORDER NOTCH FILTER FOR GRID-CONNECTED SOLAR PV SYSTEM WITH POWER QUALITY IMPROVEMENT. Objective: The main objective of this project is to reduce the harmonics distortion, reactive power burden on the system and unbalancing of connected loads.
TEMAPS487	ADAPTIVE HYBRID GENERALIZED INTEGRATOR BASED SMO FOR SOLAR PV ARRAY FED ENCODER LESS PMSM DRIVEN WATER PUMP. Objective: The Main Objective of this Project is to increase its accuracy, reliability of the PMSM using Adaptive Hybrid Generalized Integrator Based SMO.
TEMAPS471	ENERGY MANAGEMENT STRATEGY FOR HYBRID PUMPED HYDRO PHOTO VOLTAIC SYSTEM FOR AGRI PURPOSE-{CONCEPT-BASED} Objective: The Main Objective of this Project is to design hybrid micro-

grid systems like SPV system, hydro system and grid.

TEPGPS505, TEMSPS539	DESIGN AND CONTROL OF PV-UPQC USING VARIABLE LEAKY LMS BASED ALGORITHM FOR POWER QUALITY ENHANCEMENT Objective: The Main Objective of this Project is to improve the Power quality of the system using PV-UPQC.
TEPGPS121, TEMAPS169	IMPLEMENTATION OF SOLAR PV- BATTERY AND DIESEL GENERATOR BASED ELECTRIC VEHICLE CHARGING STATION Objective: The main objective of this project is to regulate the frequency and voltage of DG set without a mechanical automatic voltage regulator.
TEMAPS406	THE NEW CONTROL SCHEME FOR THE PV AND WIND HYBRID SYSTEM CONNECTED TO THE SINGLE PHASE GRID Objective: The main objective of this project is to keep the power output constant if any variation in the input from the PV and wind system occurs, and the output voltage at the grid remains constant
TEMAPS187	VOLTAGE SAG ENHANCEMENT OF GRID CONNECTED HYBRID PV-WIND POWER SYSTEM USING BATTERY AND SMES BASED DYNAMIC VOLTAGE RESTORER Objective: The main objective of this project is to withstand and secure the effect of voltage fluctuation of grid connected hybrid PV-wind power system.
TEMAPS10, TEREPS19_10	MITIGATION OF INTER HARMONICS IN PV SYSTEMS WITH MAXIMUM POWER POINT TRACKING MODIFICATION Objective: The main objective of this project is to decrease the inter-harmonic emission level.
TEPGPS404	DESIGN OF BATTERY CHARGING CIRCUIT THROUGH MPPT USING SPV SYSTEM Objective: The main objective of this project is to design a battery charging circuit through P&O and INC MPPT using SPV system.
TEMAPS428	INTEGRATION OF SOLAR PV WITH BATTERY ENERGY STORAGE SYSTEM Objective: The main objective of this project is to design a battery charging circuit through P&O and INC MPPT using SPV system.
TEMAPS489	IMPROVED BETA PARAMETER BASED MPPT METHOD IN PHOTOVOLTAIC SYSTEM Objective: The objective of this paper is to enhance the fast tracking speed, less oscillations and dynamic behavior of the photovoltaic system with different MPPT techniques.

TEPGPS381, TEMACS25	<p>A FLL-BASED CONTROL TECHNIQUE FOR GRID INTERFACED THREE PHASE PV SYSTEM</p> <p>Objective: The main objective of this project is to eliminate harmonics and balance currents in the circuit.</p>
TEMAPS427, TEPGPS400	<p>AN IMPLEMENTATION OF SOLAR PV ARRAY BASED MULTIFUNCTIONAL EV CHARGER</p> <p>Objective: The main objective of this paper is to achieve Unity Power Factor (UPF) operation and Total Harmonic Distortion (THD) of the grid current within 5 percent.</p>
TEPGPS413, TEMAPS438	<p>POWER QUALITY IMPROVEMENT OF GRID-CONNECTED PHOTOVOLTAIC SYSTEMS USING TRANS-Z-SOURCE INVERTER UNDER PARTIAL SHADING CONDITION</p> <p>Objective: The main objective of this project is to improve the power quality of on-grid Photo-Voltaic (PV) systems by implementing a new solar PV fed Dynamic Voltage restorer based on Trans-Z-Source Inverter</p>
TEMAPS429, TEPGPS402	<p>LOW VOLTAGE RIDE-THROUGH CAPABILITY CONTROL FOR SINGLE-STAGE INVERTERBASED GRID-CONNECTED PHOTOVOLTAIC POWER PLANT</p> <p>Objective: The main objective of this project is to control a strategy of single-stage PV power plant to enhance the LVRT capability based on the Malaysian standards and modern grid codes connection requirements.</p>
TEPGCS21, TEMACS27	<p>RECURSIVE DIGITAL FILTER BASED CONTROL FOR POWER QUALITY IMPROVEMENT OF GRID TIED SOLAR PV SYSTEM</p> <p>Objective: The main objective of this project is to eliminate harmonics and compensating reactive power required by the load.</p>
TEMAPS411, TEMAPS412, TEPGPS378, TEPGPS379	<p>ENERGY MANAGEMENT SYSTEM FOR SMALL SCALE HYBRID WIND SOLAR BATTERY BASED MICRO GRID</p> <p>Objective: The main objective of this project is to balance the power in solar wind based hybrid energy storage system.</p>
TEPGPS140,TEPGPS141, TEMAPS183,TEMAPS184	<p>VOLTAGE AND CURRENT PROFILE IMPROVEMENT OF A PV-INTEGRATED GRID SYSTEM EMPLOYING SINUSOIDAL CURRENT CONTROL STRATEGY BASED UNIFIED POWER QUALITY CONDITIONER</p> <p>Objective: The main objective of this paper is to regulate the load voltage, mitigates voltage transients, and eliminates source harmonics.</p>
TEPGPS153	<p>CONSTRUCTION AND PERFORMANCE INVESTIGATION OF THREE-PHASE SOLAR PV AND BATTERY ENERGY STORAGE SYSTEM INTEGRATED UPQC</p> <p>Objective: The main objective of this project is to mitigate the power quality problems existing in the grid and the harmonics penetrated by the non-linear loads. Providing power especially during the</p>

	longer-term voltage interruption.
TEPGCS27, TEMACS33	A NEW HYBRID METHOD BASED ON FUZZY LOGIC FOR MAXIMUM POWER POINT TRACKING OF PHOTOVOLTAIC SYSTEMS Objective: the main objective of this project is to track the maximum power point of PV systems to decrease computation power requirement, while increasing the speed and efficiency of the tracking.
TEPGPS149, TEMAPS192, TEPGCS37, TEMACS43	FLEXIBLE POWER-POINT-TRACKING-BASED FREQUENCY REGULATION STRATEGY FOR PV SYSTEM Objective: the main objective of this paper is an adaptive step size tracking method is proposed to improve the output power fluctuation around the suboptimal power point.
TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY, GRID, BATTERY AND DIESEL GENERATOR SET BASED EV CHARGING STATION Objective: The main objective of this paper is to provide continuous charging and uninterruptable supply to house loads. It will also regulate generator voltage and frequency, harmonic current compensation of non-linear loads and intentional reactive power compensation.
TEMAPS497, TEPGPS461, TEPGPE134	SIMULATION MODEL OF H6 TRANSFORMERLESS SINGLE PHASE FULL BRIDGE PV GRID TIED INVERTERS Objective: The main objective of this paper is to implement the safety measures of leakage currents in transformer less inverters in photovoltaic generation.
TEMAPS434, TEMAPS435	FUZZY CONTROLLER BASED GRID INTEGRATION OF HYBRID SOLAR PHOTOVOLTAIC AND DFIG WIND ENERGY SYSTEM TO IMPROVE POWER QUALITY Objective: The main objective of this project is to improve the power quality of the hybrid Photovoltaic (PV) and Doubly Fed Induction Generator (DFIG) based wind energy system.
TEPGPS194, TEMAPS233	PERFORMANCE ANALYSIS OF SOLAR PV ARRAY AND BATTERY INTEGRATED UNIFIED POWER QUALITY CONDITIONER FOR MICROGRID SYSTEMS Objective: The main objective of this project is to improve the power quality at the load side and supply side and regulate load voltages while maintaining grid current sinusoidal and the power factor close to unity.
TEMAED131, TEPGED127, TEMAPS548,	VEHICLE-TO-GRID ANCILLARY SERVICES USING SOLAR POWERED ELECTRIC VEHICLE CHARGING STATIONS Objective: The main objective of this paper is to enhance the better

TEPGPS514	dynamic response of motor with less harmonic distortions and torque fluctuations.
TEGPS131,TEGPS133, TEGPS134,TEMAPS174, TEMAPS175,TEMAPS176	SOLAR PV-BES BASED MICRO-GRID SYSTEM WITH MULTI-FUNCTIONAL VSC Objective: The main objective of this project is maximum power extraction from a PV Array, reactive power compensation, harmonics mitigation and balancing of grid currents.
TEPGPS125,TEPGPS126, TEPGPS127,TEPGPS128	DISTRIBUTED INCREMENTAL ADAPTIVE FILTER CONTROLLED GRID INTERACTIVE RESIDENTIAL PHOTOVOLTAIC BATTERY BASED MICRO GRID FOR RURAL ELECTRIFICATION Objective: The main objective of this project is to provide continuous supply to the emergency loads, harmonics mitigation, load balancing and power factor improvement.
TEPGPS334 TEMAPS374	IMPLEMENTATION OF SOLAR PHOTOVOLTAIC SYSTEM WITH UNIVERSAL ACTIVE FILTERING CAPABILITY Objective: The main objective of this project is to implement the solar PV system with universal active filtering capability
TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY GRID BATTERY AND GENERATOR SET BASED EV CHARGING STATION Objective: The main objective of this paper is to provide continuous charging and uninterruptable supply to house loads. It will also regulate generator voltage and frequency, harmonic current compensation of non-linear loads and intentional reactive power compensation.
TEPGPS408	A MULTIFUNCTIONAL SOLAR PV AND GRID BASED ON BOARD CONVERTER FOR ELECTRIC VEHICLES Objective: The main objective of this paper is to charge of plug-in electric vehicles using dual power sources (grid and solar PV).
TEPGPS409	VOLTAGE PROFILE AND POWER QUALITY IMPROVEMENT IN PV FARMS INTEGRATED MEDIUM VOLTAGE GRID USING DYNAMIC VOLTAGE RESTORER Objective: The main objective of this paper is to analyze the power quality of three phases medium voltage grid connected with distribution generation (DG) such as photovoltaic (PV) farms and its control schemes.
TEPGPE123	A NOVEL SINGLE STAGE BUCK BOOST TRANSFORMER LESS INVERTER FOR 1 PHASE GRID CONNECTED SOLAR PV SYSTEMS Objective: the main objective of this paper is to eliminate the leakage currents and track the maximum power point even under the wide variation of input PV voltage

TEPGPS145,	A MICROGRID BASED ON WIND DRIVEN DFIG,DG & SOLAR PV ARRAY FOR FUEL CONSUMPTION Objective: The main objective of this project is to control the power quality issues such as load unbalance compensation, harmonics compensation and reactive power compensation and extract the maximum power from wind.
TEMAPS04,TEMAPS03, TEREPS19_02,TEREPS19_03, TEREPS19_04,TEMAPE05, TEMAPE06	GRID CONNECTED PV COGENERATION USING BACK TO BACK VOLTAGE SOURCE CONVERTERS Objective: The main objective of this paper is simple and efficient for a grid-connected wind-photovoltaic (PV) cogeneration system.
TEMAPS481, TEMAPS482, TEPGPS450, TEPGPS451	ADAPTIVE CONTROL OF VOLTAGE SOURCE CONVERTER BASED SCHEME FOR POWER QUALITY IMPROVED GRID-INTERACTIVE SOLAR PV-BATTERY SYSTEM Objective: the main objective of this project is to improve power quality under various loading conditions with the help of adaptive learning based back propagation.
TEMSPS568 TEPGPS533	IMPROVED SMS ISLANDING DETECTION METHOD FOR GRID-CONNECTED CONVERTERS Objective: The main objective of this project is to improve the islandingdetection capability for grid connected converters.

## EEE POWER SYSTEMS IEEE TITLES – WIND POWERGENERATION DOMAIN

TEMAPS565,TEMAED147, TEPGPS530,TEPGED141, TEMAPS583,TEMACS61, TEPGPS546,TEPGCS55	ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM Objective: The main objective of this project is comprehensive dynamic analysis for a renewable energy based water pumping system.
TEMAPS595,TEMAPS596, TEPGPS558,TEPGPS559	AN IMPROVED SLIDING MODE DIRECT POWER CONTROL STRATEGY BASED ON REACTIVE POWER COMPENSATION FOR VIENNA RECTIFIER Objective: The main objective of this project is to compensate reactive power for Vienna rectifier by using an improved sliding mode DPC Controlling topology.
TEMAPS598, TEPGPS561	MODELING OF A DROOP-CONTROLLED GRID-CONNECTED DFIG WIND TURBINE Objective: The main objective of this project is to propose a linearized small-signal model for modelling a droop-controlled grid connected DFIG wind turbine.
TEMAPS597,TEMACS63, TEPGCS57, TEPGPS560	DC BUS VOLTAGE CONTROL OF WIND POWER INVERTER BASED ON FIRST-ORDER LADRC Objective: The main objective of the proposed method is to improve the

	<p>stability of the DC side voltage of the direct-drive permanent magnet wind power grid-connected inverter by using First-Order LADRC</p>
<p>TEMAPS599, TEMACS64, TEPGPS562, TEPGCS58</p>	<p>SLIDING MODE CONTROL FOR GRID INTEGRATION OF WIND POWER SYSTEM BASED ON DIRECT DRIVE PMSG</p> <p>Objective: The main objective of the proposed method is to provide the dynamic performance during low/high voltage conditions.</p>
<p>TEMAPS443, TEPGPS417</p>	<p>BIDIRECTIONAL HARMONIC CURRENT CONTROL OF BRUSHLESS DOUBLY FED MOTOR DRIVE SYSTEM BASED ON A FRACTIONAL UNIDIRECTIONAL CONVERTER UNDER A WEAK GRID.</p> <p>Objective: The Main objective of this project is proposes the brushless doubly fed machine (BDFM) drive system based on a fractional unidirectional converter is a promising low-cost variable-speed drive system.</p>
<p>TEMAPS444, TEPGPS418</p>	<p>CONTROL OF SWITCHED RELUCTANCE GENERATOR IN WIND POWER SYSTEM APPLICATION FOR VARIABLE SPEEDS.</p> <p>Objective: The Main objective of this project is proposes the control of the SRG.</p>
<p>TEMAPS519, TEPGPS483</p>	<p>MODELING AND COORDINATED CONTROL DESIGN FOR BRUSHLESS DOUBLY FED INDUCTION GENERATOR-BASED WIND TURBINE TO WITHSTAND GRID VOLTAGE UNBALANCE.</p> <p>Objective: The main objective of the project is to eliminate unbalanced PW current, distorted CW current and oscillations of the PW active or reactive power were analyzed.</p>
<p>TEPGPS435, TEMAPS461</p>	<p>POWER AND CURRENT LIMITING CONTROL OF WIND TURBINES BASED ON PMSG UNDER UNBALANCED GRID VOLTAGE.</p> <p>Objective: The main objective of this project is to limit the current, power and enhance the operation of wind power system during unbalanced grid voltage conditions.</p>
<p>TEPGPS437</p>	<p>HYBRID WIND/PV/BATTERY ENERGY MANAGEMENT-BASED INTELLIGENT NON-INTEGGER CONTROL FOR SMART DC-MICRO GRID OF SMART UNIVERSITY.</p> <p>Objective: The main objective of this project is to controlling the source-side converters (sscs) to extract the maximum power from the renewable energy sources (wind and PV) using the proposed IFO-PID.</p>
<p>TEMAPS411, TEMAPS412, TEPGPS378, TEPGPS379</p>	<p>ENERGY MANAGEMENT SYSTEM FOR SMALL SCALE HYBRID WIND SOLAR BATTERY BASED MICROGRID</p> <p>Objective: The main objective of this project is to balance the power in solar-wind based hybrid energy storage system.</p>
<p>TEMAPS565, TEMAED147, TEPGPS530, TEPGED141</p>	<p>ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM</p> <p>Objective: The main objective of this project is comprehensive dynamic</p>

	analysis for a renewable energy based water pumping system
TEPGPS423, TEMAPS449	<p>PARAMETER ADJUSTMENT FOR THE DROOP CONTROL OPERATING A DISCHARGE PEC IN PMG-BASED WECSS WITH GENERATOR-CHARGED BATTERY UNITS.</p> <p>Objective: Main objective of this project aims to enhance the ability of the PMG-based WECS and its battery storage system to meet their command power delivery, while ensuring the frequency and voltage stability at the PCC.</p>
TEMAPS485,TEMAPS486, TEPGPS454,TEPGPS455	<p>DETECTION METHOD OF GRID VOLTAGE SAG FOR OFFSHORE WIND POWER CONVERTER</p> <p>Objective: The main objective of this project is to find a detection method of grid voltage sag suitable for LVRT of offshore wind power converters.</p>
TEMAPS615,TEPGPS578	<p>A NOVEL APPROACH TO MAXIMIZE PERFORMANCE AND RELIABILITY OF PMSG BASED WIND TURBINE</p> <p>Objective: The main objective of this project is to maximize the performance and reliability of PMSG based Wind Turbine.</p>
TEMAPS494, TEPGPS458	<p>ROBUST CONTROL FOR ISLANDED AND SEAMLESS MODE SWITCHING OF WIND-PV-GRID TIED GENERATION SYSTEM.</p> <p>Objective: The main objective of this project is to improve the quality of generated power into the grid.</p>
TEMAPS550, TEPGPS516	<p>DUAL MODE OPERATION OF WIND-SOLAR WITH ENERGY STORAGE BASED MICROGRID INTEGRATED TO UTILITY GRID</p> <p>Objective: The main objective of this project is to remote village electrification along with the accessibility of continuous power is provided by the integrated operation of microgrid assisted by utility grid.</p>
CONCEPT-BASED	LOW VOLTAGE RIDE THROUGH (LVRT) OF GRID INTERFACED WIND DRIVEN DFIG (USING FUZZY LOGIC)-{CONCEPT-BASED}
CONCEPT-BASED	COMPARATIVE ANALYSIS OF ENHANCING THE VOLTAGE STABILITY OF DFIG BASED WINDFARM USING SVC & UPFC-{CONCEPT-BASED}
TEMAPS520, TEPGPS484	<p>MAXIMUM POWER POINT TRACKING FOR WIND TURBINE USING INTEGRATED GENERATOR-RECTIFIER SYSTEMS.</p> <p>Objective: The main objective of this project Deployment of the integrated systems in offshore wind energy, which requires maximum power point tracking (MPPT) capability.</p>
TEMAED134, TEPGED130	ENERGY MANAGEMENT AND OPTIMIZATION OF VEHICLE-TO-GRID SYSTEMS FOR WIND POWER INTEGRATION

	Objective: The main objective of this project is to energy management between Electric Vehicle to grid system for grid power integration
TEPGPS452, TEMAPS483	SIMULATION AND MODELING OF A WIND TURBINE USING PMSG WITH MAXIMUM POWER TRACKING CONTROL Objective: The main objective of this project is modelling of the wind turbine along with the synchronous generator is primarily done which is fed to a utility with the help of a dc/dc rectifier and boost model.
TEPGPS423, TEMAPS449	PARAMETER ADJUSTMENT FOR THE DROOP CONTROL OPERATING A DISCHARGE PEC IN PMG-BASED WECS WITH GENERATOR-CHARGED BATTERY UNITS. Objective: Main objective of this project aims to enhance the ability of the PMG-based WECS and its battery storage system to meet their command power delivery, while ensuring the frequency and voltage stability at the PCC.
TEMAPS406	THE NEW CONTROL SCHEME FOR THE PV AND WIND HYBRID SYSTEM CONNECTED TO THE SINGLE PHASE GRID Objective: The main objective of this project is to keep the power output constant if any variation in the input from the PV and wind system occurs, and the output voltage at the grid remains constant

TEMAPS187,TEMAPS188, TEPGPS144,TEPGPS145, TEPGPS146,TEMAPS189	VOLTAGE SAG ENHANCEMENT OF GRID CONNECTED HYBRID PV-WIND POWER SYSTEM USING BATTERY AND SMES BASED DYNAMIC VOLTAGE RESTORER Objective: The main objective of this project is to reduce symmetrical and asymmetrical voltage sags in the system.
TEPGPS187,TEMSPS207, TEPGCS16	COORDINATED FUZZY-BASED LOW-VOLTAGE RIDE-THROUGH CONTROL FOR PMSG WIND TURBINES AND ENERGY STORAGE SYSTEMS Objective: The main objective of this project is to enhance the LVRT response and improve the stability of the system.
TEPGPS166,TEMAPS206, TEPGCS34,TEMACS40	WIND-SPEED ESTIMATION AND SENSOR LESS CONTROL FOR SPMSG-BASED WECS USING LMI-BASED SMC Objective: The main objective of this project is eliminating the sensor requirements for measuring the wind speed, rotor speed and rotor position thereby enhancing system reliability and reducing the complexity.
TEMAPS411,TEMAPS412, TEPGPS378,TEPGPS379	ENERGY MANAGEMENT SYSTEM FOR SMALL SCALE HYBRID WIND SOLAR BATTERY BASED MICROGRID Objective: The main objective of this project is to balance the power in Solar Wind based HESS

TEPGPS159,TEPGED20, TEMAPS202,TEMAED19	EMULATION OF WIND TURBINE SYSTEM USING VECTOR CONTROLLED INDUCTION MOTOR DRIVE Objective: The main objective of this project is using of feed-forward compensation will reduce the disturbances in the torque, owing to its poor disturbance rejection capability.
TEMAPS431, TEPGPS406	MODELLING OF A WIND TURBINE WITH PERMANENT MAGNET SYNCHRONOUS GENERATOR Objective: The main objective of this project is the implementation and simulation of a Simulink-based controlled permanent magnet synchronous generator (PMSG) wind turbine in the dq0 reference frame.
TEPGPS164, TEMAPS205	TESTING THE PERFORMANCE OF BATTERY ENERGY STORAGE IN A WIND ENERGY CONVERSION SYSTEM Objective: The main objective of this project is to regulate the errors in the net power flow and reduce the conduction losses and performs the dynamic and transient performances of the system.
TEPGPS156, TEPGPS157, TEMAPS199, TEMAPS200	DESIGN AND ANALYSIS OF GRID-INTERACTIVE DFIG BASED WECS FOR REGULATED POWER FLOW Objective: The main objective of this project is sharing of reactive power at below rated wind speeds, which essentially reduces the amount of rotor winding copper loss and maintaining the unity power stator terminals.
TEMSPS434, TEMAPS435	FUZZY CONTROLLER BASED GRID INTEGRATION OF HYBRID SOLAR PHOTOVOLTAIC AND DFIG WIND ENERGY SYSTEM TO IMPROVE POWER QUALITY Objective: The main objective of this project is to improve the power quality of the hybrid Photovoltaic (PV) and Doubly Fed Induction Generator (DFIG) based wind energy system.
TEPGED123,TEMAED123, TEMAED127,TEPGPS507, TEMAPS541	MODEL PREDICTIVE DIRECT POWER CONTROL OF DOUBLY FED INDUCTION GENERATORS UNDER BALANCED AND UNBALANCED NETWORK CONDITIONS Objective: The main objective of this project is to control the power of high performance DFIG under both balanced and unbalanced network.
TEPGPS410	MODELLING AND SIMULATION OF WIND TURBINE EMULATOR USING DC MOTOR Objective: The main objective of this project is to control the wind turbine behavior through current control of dc motor with a PI controller
TEPGPS175,TEPGPS176, TEPGPS177,TEMAPS214, TEMAPS215,TEMAPS216	A MICRO GRID BASED ON WIND DRIVEN DFIG,DG & SOLAR PV ARRAY FOR FUEL CONSUMPTION Objective: The main objective of this project is to control the power quality issues such as load unbalance compensation, harmonics

	compensation and reactive power compensation and extract the maximum power from the wind turbine.
TEMAPS483, TEPGPS452	SIMULATION & MODELLING OF A WIND TURBINE USING PMSG WITH MAXIMUM POWER TRACKING CONTROL Objective: The main objective of the project is modelling of the wind turbine along with the synchronous generator is primarily done which is fed to a utility with the help of a dc/dc rectifier and boost model.

## EEE POWER SYSTEMS IEEE TITLES – POWERQUALITY DOMAIN

TEMAPS580,TEMAPS581, TEMAPS582,TEPGPS543, TEPGPS544,TEPGPS545	THREE-LEVEL T-TYPE QUASI-Z SOURCE PV GRID-TIED INVERTER WITH ACTIVE POWER FILTER FUNCTIONALITY UNDER DISTORTED GRID VOLTAGE Objective: The main objective of this project is to provide the stability and good dynamic response of the grid-connected 3L-T-type qzsi.
TEMAPS601,TEPGPS564	A NEW TECHNIQUE IMPLEMENTED IN SYNCHRONOUS REFERENCE FRAME FOR DVR CONTROL UNDER SEVERE SAG AND SWELL CONDITIONS Objective: The main objective of this project is controlling of DVR in distribution systems under severe transient conditions.
TEMAPS590,TEMAPS591 TEPGPS553,TEPGPS554	FASTER CONVERGENCE CONTROLLER WITH DISTORTED GRID CONDITIONS FOR PHOTOVOLTAIC GRID FOLLOWING INVERTER SYSTEM Objective: The main objective of this project is to improve power quality and achieve zero steady state error by using MDBHCC with PR controller.
TEMAPS602, TEMAPE211, TEPGPS565, TEPGPE183	BIDIRECTIONAL POWER CONTROL STRATEGY FOR SUPER CAPACITOR ENERGY STORAGE SYSTEM BASED ON MMC DC-DC CONVERTER Objective: The main objective of this project is to employ a bidirectional power control strategy for Super Capacitor Energy Storage System Based on MMC DC-DC Converter.
TEMAPS595, TEMAPS596, TEPGPS558, TEPGPS559	AN IMPROVED SLIDING MODE DIRECT POWER CONTROL STRATEGY BASED ON REACTIVE POWER COMPENSATION FOR VIENNA RECTIFIER Objective: The main objective of this project is to compensate reactive power for Vienna rectifier by using an improved sliding mode DPC Controlling topology.
TEMAPS443, TEPGPS417	BIDIRECTIONAL HARMONIC CURRENT CONTROL OF BRUSHLESS DOUBLY FED MOTOR DRIVE SYSTEM BASED ON A FRACTIONAL UNIDIRECTIONAL CONVERTER UNDER A WEAK GRID. Objective: The Main objective of this project is proposes the brushless doubly fed machine (BDFM) drive system based on a fractional unidirectional converter is a promising low-cost variable-speed drive system.

TEPGPS414, TEMAPS440	<p>A LYAPUNOV-FUNCTION BASED CONTROLLER FOR 3-PHASE SHUNT ACTIVE POWER FILTER AND PERFORMANCE ASSESSMENT CONSIDERING DIFFERENT SYSTEM SCENARIOS</p> <p>Objective: The Main objective of this project is implement the rating of the shunt active power filter is considerably reduced than the other two broadly employed conventional methods.</p>
TEMAPS573, TEPGPS536	<p>LYAPUNOV FUNCTION BASED CONTROL STRATEGY FOR SINGLE-PHASE GRID-CONNECTED PV SYSTEM WITH LCL-FILTER</p> <p>Objective: The main objective of this project is to improve the stability under changing atmospheric conditions in grid connected PV system with LCL filter.</p>
TEMAPS562, TEPGPS527	<p>POWER QUALITY IMPROVEMENT USING FUZZY-PI CONTROLLED D-STATCOM</p> <p>Objective: The main objective of this project is to improve power quality by using Fuzzy-PI Controlled D-STATCOM.</p>
TEPGPE156, TEPGPS498, TEMAPE183, TEMAPS532	<p>CONTROL OF A THREE-PHASE POWER CONVERTER CONNECTED TO UNBALANCED POWER GRID IN A NON-CARTESIAN OBLIQUE FRAME</p> <p>Objective: The main objective of the proposed method is, to avoid multiple transformations of positive and negative sequence of current, oscillatory terms and gives better results without overregulation.</p>
TEPGPE158,TEMAPE185, TEMAPS536,TEPGPS501, TEMAPS509,TEPGPS474	<p>Multi-Mode Operation and Control of a Z-Source Virtual Synchronous Generator in PV Systems</p> <p>Objective: The main objective of this project is to improve the stability and track the frequency of the Power Electronic Converters.</p>
TEPGPS420, TEMAPS446	<p>Inertia and Damping Analysis of Grid-Tied Photovoltaic Power Generation System With DC Voltage Droop Control.</p> <p>Objective: Main objective of this project aims to analyze the inertia, damping and synchronization characteristics of the Grid-Tied Photovoltaic Power Generation System with DC Voltage Droop Control.</p>
TEPGPS424, TEMAPS40	<p>Bidirectional Power Flow Control Integrated With Pulse and Sinusoidal-Ripple-Current Charging Strategies for Three-Phase Grid-Tied Converters.</p> <p>Objective: The objective of this paper is to propose bidirectional charging/discharging strategies for three-phase grid-tied converters.</p>
TEMAPS535	<p>MODELING AND COORDINATED CONTROL DESIGN FOR BRUSHLESS DOUBLY-FED INDUCTION GENERATOR-BASED WIND TURBINE TO WITHSTAND GRID VOLTAGE UNBALANCE</p> <p>Objective: The main objective of the project is to eliminate unbalanced PW current, distorted CW current and oscillations of the PW active or reactive power were analyzed.</p>
TEMAED88, TEMAPS453	<p>SOLAR POWERED UNMANNED AERIAL VEHICLE WITH ACTIVE OUTPUT FILTER UNDER NON-LINEAR LOAD CONDITIONS</p>

	Objective: The objective of this paper is to propose Active Output Filter system AOF reduces the size and weight of the power transmission system while significantly improving its conversion efficiency.
TEPGPS433, TEMAPS459	PARTIAL POWER CONVERSION AND HIGH VOLTAGE RIDE-THROUGH SCHEME FOR A PV-BATTERY BASED MULTI-PORT MULTI-BUS POWER ROUTER. Objective: The main objective of this project is to partial power conversation and high voltage ride through for PV-battery energy storage system.
TEPGPS435, TEMAPS461	POWER AND CURRENT LIMITING CONTROL OF WIND TURBINES BASED ON PMSG UNDER UNBALANCED GRID VOLTAGE. Objective: The main objective of this project is to limit the current, power and enhance the operation of wind power system during unbalanced grid voltage conditions.
TEMAPS560, TEPGPS525	VOLTAGE STABILITY ENHANCEMENT USING FACTS DEVICES Objective: The main objective of this project is to enhance the voltage profile improvement in transmission systems by using FACTS DEVICES.
TEPGPS438, TEMAPS464	Control Strategy Research of D-STATCOM Using Active Disturbance Rejection Control Based on Total Disturbance Error Compensation Objective: The Main Objective Of This Project Is To Improve The Dynamic Tracking Response Speed And Anti-Interference Ability Of The System.
TEPGPS439, TEMAPS465	CONTROL OF PHOTOVOLTAIC INVERTERS FOR TRANSIENT AND VOLTAGE STABILITY ENHANCEMENT. Objective: The main objective of this project is to, improve the transient stability and enhance the voltage stability of solar PV system.
TEMAPS470	POWER QUALITY IMPROVEMENT WITH D-STATCOM USING COMBINED PR AND COMB FILTER- CONTROLLER Objective: The main objective of this project is to maintain power quality in distribution system with the help of D-STATCOM.

TEMAPS468	PV BASED SHUNT ACTIVE HARMONIC FILTER FOR POWER QUALITY IMPROVEMENT Objective: The main objective of this project is SAHF system provides harmonic mitigation, power factor correction, and load compensation.
TEPGPS411, TEMAPS467	GRID-CONNECTED INDUCTION MOTOR USING A FLOATING DC-LINK CONVERTER UNDER UNBALANCED VOLTAGE SAG Objective: The main objective of this project to eliminate unbalanced PW current, distorted CW current and oscillations of the PW active or reactive power were analyzed.
TEMAPS478 TEPGPS448	SYSTEM MODELING AND STABILITY ANALYSIS OF SINGLE- PHASE TRANSFORMER LESS UPQC INTEGRATED INPUT GRID VOLTAGE REGULATION Objective: The main objective of this project is to exchanging reactive

	power between the system and the grid to provide input grid voltage regulation.
TEPGPS447, TEMAPS477	FRACTIONAL ORDER NOTCH FILTER FOR GRID-CONNECTED SOLAR PV SYSTEM WITH POWER QUALITY IMPROVEMENT. Objective: The main objective of this project is to reduce the harmonics distortion, reactive power burden on the system and unbalancing of connected loads.
TEMAPS567, TEPGPS531 TEPGPS532, TEMAPS566	IMPROVED POWER QUALITY IN A SOLAR PV PLANT INTEGRATED UTILITY GRID BY EMPLOYING A NOVEL ADAPTIVE CURRENT REGULATOR Objective: The main objective of this project is to improve voltage and power quality under load changes.
CONCEPT-BASED	COMPARATIVE ANALYSIS OF ENHANCING THE VOLTAGE STABILITY OF DFIG BASED WINDFARM USING SVC & UPFC –{CONCEPT-BASED}
CONCEPT-BASED	POWER QUALITY IMPROVEMENT WITH HELP OF SRF-PI,MSRF-PI,MSRF-FLC BASED DESIGNED SAPF (CASE 1 & 2 & 3)
TEPGPS460, TEMAPS496	MITIGATION AND IMPROVEMENT OF POWER QUALITY USING SHUNT SERIES SWITCHED GRID TIED INVERTER (SSS-GTI) Objective: The main objective of this project is to improve the power quality of distributed energy sources in network associated mode and islanded mode.
TEMAPS571 TEMAPS572	SIMULATION AND MODELING OF STATCOM AND WINDFARM IN THE TRANSMISSION LINE USING MATLAB AND ANALYSIS OF BUS VOLTAGE Objective: The main objective of this project is to facilitate continuous operation of wind turbines during disturbances, stability improvement and proper reactive power compensation by using STATCOM.
TEPGPS505, TEMAPS539	DESIGN AND CONTROL OF PV-UPQC USING VARIABLE LEAKY LMS BASED ALGORITHM FOR POWER QUALITY ENHANCEMENT Objective: The main objective of this project is to improve the Power quality of the system using PV-UPQC.
TEPGPS172,TEMAPS212	A NEW PROTECTION SCHEME FOR AN SSSC IN AN MV NETWORK BY USING A VARISTOR AND THYRISTORS Objective: Main objective of this project aims to improve the reliability and flexibility of the network operation.
TEMAPS408	DESIGN OF LCL FILTER FOR THREE-PHASE INVERTER CONNECTED TO THE LOAD Objective: The main objective of this project is to design LCL filter is to remove the peak near the resonance frequency for three-phase inverter connected to the Load.
TEMAPS569 TEPGPS534	CONTROL OF GRID TIED SMART PV-DSTATCOM SYSTEM USING AN ADAPTIVE TECHNIQUE Objective: The main objective of this project is to improve the power

	<p>quality and support the three phase AC grid by supplying power to the both grid as well as connected loads</p>
TEPGCS18, TEMACS25, TEPGPS381	<p>A FLL-BASED CONTROL TECHNIQUE FOR GRID INTERFACED THREE PHASE PV SYSTEM</p> <p>Objective: The main objective of this project is to eliminate harmonics, grid currents balancing and to improve the system performance during distorted grid conditions.</p>
TEMAPS427, TEPGPS400	<p>AN IMPLEMENTATION OF SOLAR PV ARRAY BASED MULTIFUNCTIONAL EV CHARGER</p> <p>Objective: The main objective of this paper is to achieve Unity Power Factor (UPF) operation and Total Harmonic Distortion (THD) of the grid current within 5 percent.</p>
TEPGCS21, TEMACS27	<p>RECURSIVE DIGITAL FILTER BASED CONTROL FOR POWER QUALITY IMPROVEMENT OF GRID TIED SOLAR PV SYSTEM</p> <p>Objective: The main objective of this paper is eliminating harmonics and compensating reactive power required by the load and control the load unbalancing, voltage sag, voltage distortion, voltage swell and changing solar irradiation conditions.</p>
TEPGPS140, TEPGPS141, TEMAPS183, TEMAPS184	<p>VOLTAGE AND CURRENT PROFILE IMPROVEMENT OF A PV-INTEGRATED GRID SYSTEM EMPLOYING SINUSOIDAL CURRENT CONTROL STRATEGY BASED UNIFIED POWER QUALITY CONDITIONER</p> <p>Objective: The main objective of this paper is to regulate the load voltage, mitigate voltage transients, eliminates source current harmonics.</p>
TEPGPS174, TEMAPS213	<p>A NEW CONTROL STRATEGY FOR THREE-PHASE SHUNT ACTIVE POWER FILTERS BASED ON FIR PREDICTION</p> <p>Objective: The main objective of this paper is to a new discrete-time control strategy for Three-Phase Three-Wire Shunt Active Power Filters (APF).</p>
TEMAPS430, TEPGPS405	<p>DESIGN OF ADAPTIVE CONTROLLER FOR REGULATING THE VOLTAGE BY A DYNAMIC VOLTAGE RESTORER DVR</p> <p>Objective: The main objective of this project is the low quality problems of power equipping; the modifier of voltage source could be connected by transmission lines serial, which put as compensators.</p>
TEPGPS153	<p>CONSTRUCTION AND PERFORMANCE INVESTIGATION OF THREE-PHASE SOLAR PV AND BATTERY ENERGY STORAGE SYSTEM INTEGRATED UPQC</p> <p>Objective: Main objective of this project is to mitigate the power quality problems existing in the grid and the harmonics penetrated by the non-linear loads. Providing power especially during the longer-term voltage interruption.</p>

TEPGPE70, TEMAPE84	<p>CASCADED MULTILEVEL PV INVERTER WITH IMPROVED HARMONIC PERFORMANCE DURING POWER IMBALANCE BETWEEN POWER CELLS</p> <p>Objective: The main objective of this project is to mitigate voltage and current distortions by injecting power with lower voltage from the shaded cells without altering the PV voltage.</p>
TEPGPS509, TEPGPS508, TEMAPS543, TEMAPS542	<p>POWER QUALITY IMPROVEMENT OF GRID-CONNECTED PHOTOVOLTAIC SYSTEMS USING TRANS-Z-SOURCE INVERTER UNDER PARTIAL SHADING CONDITION</p> <p>Objective: The main objective of this project is to improve the power quality to reduce the total harmonic distortion and to reduce voltage stress across the switches.</p>
TEPGPS184, TEMAPS223	<p>A NOVEL IUPQC FOR MULTI-FEEDER SYSTEMS USING MULTILEVEL CONVERTERS WITH GRID INTEGRATION OF HYBRID RENEWABLE ENERGY SYSTEM</p> <p>Objective: The main objective of this project is to compensate the sag/swell and current/voltage harmonics</p>
TEPGPS182, TEMAPS221, TEPGCS29, TEMACS35	<p>POWER QUALITY ENHANCEMENT IN A GRID-CONNECTED HYBRID SYSTEM WITH COORDINATED PQ THEORY &amp; FRACTIONAL ORDER PID CONTROLLER IN DPFC</p> <p>Objective: The main objective of this project is to new FACTS-based distributed power flow controller (DPFC) that incorporates a coordinated PQ theory and a FOPID controller is proposed to mitigate the power quality issues.</p>
TEPGPS307	<p>POWER QUALITY ENHANCEMENT FOR A GRID CONNECTED WIND TURBINE ENERGY SYSTEM</p> <p>Objective: The main objective of this project is to enhance the power quality for a grid connected wind turbine energy system.</p>
TEPGPS129,TEPGPS130, TEMAPS172,TEMAPS173	<p>Grid Connected PV System with Reactive Power Compensation for the Grid</p> <p>Objective: The main objective of this project is to design of grid connected solar inverters to perform the unity power factor, which can produce active power only.</p>
TEMAPS433	<p>A NOVEL TRANSFORMER LESS HYBRID SERIES ACTIVE FILTER</p> <p>Objective: The main objective of this project is to connect a Novel transformer less Hybrid series active filter to the grid without requiring a costly series injection transformer.</p>
TEPGPS156, TEPGPS157, TEMAPS199, TEMAPS200	<p>DESIGN AND ANALYSIS OF GRID-INTERACTIVE DFIG BASED WECS FOR REGULATED POWER FLOW</p> <p>Objective: The main objective of this project is sharing of reactive power at below rated wind speeds, which essentially reduces the amount of rotor winding copper loss and maintaining the unity power at stator terminals.</p>

TEMAPS434, TEMSPS435	<p>FUZZY CONTROLLER BASED GRID INTEGRATION OF HYBRID SOLAR PHOTOVOLTAIC AND DFIG WIND ENERGY SYSTEM TO IMPROVE POWER QUALITY</p> <p>Objective: The main objective of this project is to improve the power quality of the hybrid Photovoltaic (PV) and Doubly Fed Induction Generator (DFIG) based wind energy system.</p>
TEPGPS194, TEMAPS233	<p>PERFORMANCE ANALYSIS OF SOLAR PV ARRAY AND BATTERY INTEGRATED UNIFIED POWER QUALITY CONDITIONER FOR MICROGRID SYSTEMS</p> <p>Objective: The main objective of this project is to improve the power quality at the load side and supply side and regulate load voltages while maintaining grid current sinusoidal and the power factor close to unity.</p>
TEPGPS185, TEMAPS224	<p>POWER QUALITY IMPROVEMENT USING DYNAMIC VOLTAGE RESTORER</p> <p>Objective: The main objective of this project is to enhance the power quality using Dynamic Voltage Restorer.</p>
TEPGED28, TEMAED27	<p>VARIABLE SPEED OPERATION OF BRUSHLESS DOUBLY-FED RELUCTANCE MACHINE DRIVE USING MODEL PREDICTIVE CURRENT CONTROL TECHNIQUE</p> <p>Objective: The main objective of this project is to avoid the hectic tuning of PI controller gains, increase bandwidth of operating regions and improve the dynamic and steady state performance of the drive system.</p>
TEPGPS363	<p>AN INDUCTIVE HYBRID UPQC FOR POWER QUALITY MANAGEMENT IN PREMIUM-POWER-SUPPLY-REQUIRED APPLICATIONS</p> <p>Objective: The main objective of this project is perform grid voltage regulation, load harmonic current suppression and reactive power compensation.</p>
TEPGPS131,TEPGPS132, TEPGPS133,TEMAPS174, TEMAPS175,TEMAPS176	<p>SOLAR PV-BES BASED MICRO-GRID SYSTEM WITH MULTI-FUNCTIONAL VSC</p> <p>Objective: The main objective of this project is Maximum power extraction from a PV array, reactive power compensation, harmonics mitigation and balancing of grid currents.</p>
TEPGPS125, TEPGPS126, TEPGPS127, TEPGPS128	<p>DISTRIBUTED INCREMENTAL ADAPTIVE FILTER CONTROLLED GRID INTERACTIVE RESIDENTIAL PHOTOVOLTAIC-BATTERY BASED MICRO-GRID FOR RURAL ELECTRIFICATION</p> <p>Objective: The main objective of this project is to provide continuous supply to the emergency loads, harmonics mitigation, load balancing and power quality improvement.</p>
TEPGPS147,TEPGPS148, TEMAPS191,TEMAPS190	<p>POWER FLOW CONTROL OF HYBRID MICRO-GRIDS USING MODIFIED UIPC</p> <p>Objective: The main objective of this project is to control the exchange of power between AC-DC Microgrids</p>
TEMAPS555,	<p>NOVEL DYNAMIC VOLTAGE RESTORER WITH MULTI-FUNCTIONAL CAPABILITY</p> <p>Objective: The main objective of this project is maintaining good Power Quality and un- interrupted power are extremely important goals at</p>

TEPGPS521	many type of facilities at the present scenario.
TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY GRID BATTERY AND GENERATOR SET BASED EV CHARGING STATION Objective: The main objective of this project is to provide continuous charging and uninterruptable supply to the household loads. It will also regulate generator voltage and frequency, harmonics current compensation of non-linear loads and intentional reactive power compensation.
TEPGPS408	A MULTIFUNCTIONAL SOLAR PV AND GRID BASED ON BOARD CONVERTER FOR ELECTRIC VEHICLES Objective: The main objective of this project is to charging of plug-in electric vehicles (pevs) using dual power sources (grid and solar pv).
TEMAPS430, TEPGPS405	DESIGN OF ADAPTIVE CONTROLLER FOR REGULATING THE VOLTAGE BY A DYNAMIC VOLTAGE RESTORER DVR Objective: The main objective of this project is the low quality problems of power equipping; the modifier of voltage source could be connected by transmission lines serial, which put as compensators.
TEMAPS436	D-STATCOM FOR POWER QUALITY IMPROVEMENT IN DISTRIBUTION POWER SYSTEM USING MATLAB SIMULINK Objective: The main objective of this project is to improve the power quality in distribution system.
TEMAPS437	DESIGN AND SIMULATION OF HYBRID POWER FILTERS TO PROVIDE HARMONIC COMPENSATION AT THE AC MAINS CONNECTED TO CRITICAL NON-LINEAR LOADS Objective: The main objective of this project is test three phase power system performance under nonlinear loads with help of difference types of filters (Active & passive Filters)
TEPGPS411	HYBRID ENERGY STORAGE SYSTEM CONTROL ANALOGOUS TO POWER QUALITY ENHANCEMENT OPERATION OF INTERLINKING CONVERTERS Objective: The main objective of this project is to enhance the power quality in grid-connected system by using ESS.
TEMAPS481,TEMSPS482, TEPGPS482,TEPGPS450, TEPGPS451	ADAPTIVE CONTROL OF VOLTAGE SOURCE CONVERTER BASED SCHEME FOR POWER QUALITY IMPROVED GRID-INTERACTIVE SOLAR PV- BATTERY SYSTEM Objective: The main objective of this project is to improve power quality under various loading conditions with the help of adaptive learning based back propagation.

## EEE POWER SYSTEMS IEEE TITLES – DISTRIBUTION SYSTEM DOMAIN

TEMAPS580, TEMAPS581, TEMAPS582, TEPGPS543, TEPGPS544, TEPGPS545	THREE-LEVEL T-TYPE QUASI-Z SOURCE PV GRID-TIED INVERTER WITH ACTIVE POWER FILTER FUNCTIONALITY UNDER DISTORTED GRID VOLTAGE Objective: The main objective of this project is to provide the stability and good dynamic response of the grid-connected 3L-T-type qzsi.
TEMAPS605, TEMACS65, TEPGPS568, TEPGCS59	POWER AND CURRENT LIMITING STRATEGY BASED ON DROOP CONTROLLER WITH FLOATING CHARACTERISTIC FOR GRID-CONNECTED DISTRIBUTED GENERATION Objective: The main objective of this project is to improve the performance of grid connected distribution generations by employing power and current limiting strategy.

## EEE POWER SYSTEMS IEEE TITLES – HYBRID POWER GENERATION DOMAIN

TEMAPS608, TEMAPS609, TEMAPE213, TEPGPS571, TEPGPS572, TEPGPE185	ENERGY MANAGEMENT STRATEGY OF AC/DC HYBRID MICROGRID BASED ON SOLID-STATE TRANSFORMER Objective: The main objective of this project is to avoid the voltage fluctuation and power mismatch by using AC/DC hybrid microgrid based on solid-state transformer.
TEMAPS610, TEPGPS573	PERFORMANCE IMPROVEMENT OF GRID INTERFACED HYBRID SYSTEM USING DISTRIBUTED POWER FLOW CONTROLLER OPTIMIZATION TECHNIQUES Objective: The main objective of this project is to improve the reliability, power quality, and transient stability of a hybrid system by using Distributed Power Flow Controller Optimization Techniques.

## EEE POWER SYSTEMS IEEE TITLES – HYBRID SYSTEMS DOMAIN

TEPGPS415, TEMSPS441	A MODEL PREDICTIVE CONTROL METHOD FOR HYBRID ENERGY STORAGE SYSTEMS Objective: The main objective of this project is proposes a model predictive control (MPC) method to control three-level bidirectional DC/DC converters for grid-connections to a HESS in a DC microgrid.
TEMAPS559, TEPGPS524	DESIGN CONSIDERATION AND PERFORMANCE ANALYSIS OF A HYBRID ISLANDING DETECTION METHOD COMBINING VOLTAGE UNBALANCE/TOTAL HARMONIC DISTORTION AND BILATERAL REACTIVE POWER VARIATION Objective: The main objective of this project is to propose a hybrid islanding detection method for inverter-based distributed generation units.

TEPGPS47, TEMAPS453	<p>SOLAR POWERED UNMANNED AERIAL VEHICLE WITH ACTIVE OUTPUT FILTER UNDER NON-LINEAR LOAD CONDITIONS</p> <p>Objective: The objective of this paper is to propose Active Output Filter system AOF reduces the size and weight of the power transmission system while significantly improving its conversion efficiency.</p>
TEPGPS41, TEMAPS457	<p>PARTIAL POWER CONVERSION AND HIGH VOLTAGE RIDE-THROUGH SCHEME FOR A PV-BATTERY BASED MULTI-PORT MULTI-BUS POWER ROUTER.</p> <p>Objective: The main objective of this project is to partial power conversation and high voltage ride through for PV-battery energy storage system.</p>
TEPGPS464, TEMAPS499	<p>STABILITY EVALUATION OF AC/DC HYBRID MICROGRIDS CONSIDERING BIDIRECTIONAL POWER FLOW THROUGH THE INTERLINKING CONVERTERS.</p> <p>Objective: The objective of this paper is power flow direction on the small-signal stability of islanded droop-based hmgs.</p>
TEMAPS471	<p>ENERGY MANAGEMENT STRATEGY FOR HYBRID PUMPED HYDRO PHOTO VOLTAIC SYSTEM FOR AGRI PURPOSE- {CONCEPT-BASED}</p> <p>Objective: The Main Objective of this Project is to design hybrid micro-grid systems like SPV system, hydro system and grid.</p>
TEPGPS457	<p>ROBUST CONTROL FOR ISLANDED AND SEAMLESS MODE SWITCHING OF WIND-PV-GRID TIED GENERATION SYSTEM.</p> <p>Objective: The main objective of this project is to improve the quality of generated power into the grid.</p>
TEMAPS550, TEPGPS516	<p>DUAL MODE OPERATION OF WIND-SOLAR WITH ENERGY STORAGE BASED MICROGRID INTEGRATED TO UTILITY GRID</p> <p>Objective: The main objective of this project is to remote village electrification along with the accessibility of continuous power is provided by the integrated operation of microgrid assisted by utility grid.</p>
CONCEPT-BASED	<p>MULTI-PORT DC-AC CONVERTER WITH HELP OF BATTERY AND SOLAR</p>
TEMAPE158, TEMAPE159, TEPGPE130, TEPGPE131	<p>MULTI-PORT DC-AC CONVERTER WITH DIFFERENTIAL POWER PROCESSING DC-DC CONVERTER AND FLEXIBLE POWER CONTROL FOR BATTERY ESS INTEGRATED PV SYSTEMS</p> <p>Objective: The main objective of this project is to sustain the continuous power supply to the loads, energy storage systems (ESS), such as batteries, are usually integrated with PV systems.</p>
TEMAPS558, TEPGPS523	<p>DESIGN AND MODELING OF HYBRID DC/AC MICROGRID WITH MANIFOLD RENEWABLE ENERGY SOURCES</p> <p>Objective: The main objective of this project is to extract maximum power from the solar, wind and tidal waves at varying conditions.</p>
TEMAPS561, TEPGPS526	<p>DESIGN OF MICROGRID USING HYBRID ENERGY SOURCE FOR REMOTE LOCATION APPLICATION</p>

	<p>Objective: The main objective of this project is to eradicate the usage of fossils and to attain the power management in the micro-grid system.</p>
TEPGPS437, TEMAPS462	<p>HYBRID WIND/PV/BATTERY ENERGY MANAGEMENT-BASED INTELLIGENT NON-INTEGER CONTROL FOR SMART DC-MICRO GRID OF SMART UNIVERSITY</p> <p>Objective: The main objective of this project is to controlling the source-side converters (sscs) to extract the maximum power from the renewable energy sources (wind and PV) using the proposed IFO-PID.</p>
TEMAPS469	<p>NANO GRID TECHNIQUES FOR FARMING RELIABLE &amp; RESIDENTIAL GRID</p> <p>Objective: The main objective of this project is to maintain power management in Nano-grid.</p>
TEPGPS122, TEMAPS168	<p>IMPLEMENTATION OF SOLAR PV- BATTERY AND DIESEL GENERATOR BASED ELECTRIC VEHICLE CHARGING STATION</p> <p>Objective: The main objective of this project is to regulate the frequency and voltage of DG set without a mechanical automatic voltage regulator.</p>
TEMAPS406	<p>THE NEW CONTROL SCHEME FOR THE PV AND WIND HYBRID SYSTEM CONNECTED TO THE SINGLE PHASE GRID</p> <p>Objective: The main objective of this project is to keep the power output constant if any variation in the input from the PV and wind system occurs, and the output voltage at the grid remains constant</p>
TEMAPS187	<p>VOLTAGE SAG ENHANCEMENT OF GRID CONNECTED HYBRID PV-WIND POWER SYSTEM USING BATTERY AND SMES BASED DYNAMIC VOLTAGE RESTORER</p> <p>Objective: The main objective of this project is to withstand and secure the effect of voltage fluctuation of grid connected hybrid PV-wind power system.</p>
TEMAPS411,TEMAPS412, TEPGPS378,TEPGPS379	<p>ENERGY MANAGEMENT SYSTEM FOR SMALL SCALE HYBRID WIND SOLAR BATTERY BASED MICROGRID</p> <p>Objective: The main objective of this project is to obtain the reliability and balance the power in the Hybrid Wind Solar Battery Based Microgrid</p>
TEPGPS510,TEPGPS511, TEMAPS545,TEMAPS544	<p>OPERATION OF HYBRID AC-DC MICROGRID WITH AN INTERLINKING CONVERTER</p> <p>Objective: The main objective of this project is to the power quality of power sharing in both AC and DC sub grids.</p>
TEMAPS432	<p>DEVELOPMENT OF A HYBRID ENERGY STORAGE SYSTEM (HESS) FOR ELECTRIC AND HYBRID ELECTRIC VEHICLES</p> <p>Objective: The main objective of this project is to examine the feasibility and capability of a Hybrid Energy Storage System (HESS), composed of battery and ultra-capacitor units, through simulation.</p>

TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY, GRID, BATTERY AND DIESEL GENERATOR SET BASED EV CHARGING STATION Objective: The main objective of this project is to provide continuous charging and uninterruptable supply to the household loads. It will also regulate generator voltage and frequency, harmonics current compensation of non-linear loads and intentional reactive power compensation.
TEMSPS434, TEMAPS435	FUZZY CONTROLLER BASED GRID INTEGRATION OF HYBRID SOLAR PHOTOVOLTAIC AND DFIG WIND ENERGY SYSTEM TO IMPROVE POWER QUALITY Objective: The main objective of this project is to improve the power quality of the hybrid Photovoltaic (PV) and Doubly Fed Induction Generator (DFIG) based wind energy system.
TEPGPS175,TEPGPS176, TEPGPS177,TEMAPS214, TEMAPS215,TEMAPS216	A MICROGRID BASED ON WIND DRIVEN DFIG,DG & SOLAR PV ARRAY FOR FUEL CONSUMPTION Objective: The main objective of this project is to control the power quality issues such as load unbalance compensation, harmonics compensation and reactive power compensation and extract the maximum power from the wind turbine.

### EEE POWER SYSTEMS IEEE TITLES – MICROGRIDS DOMAIN

TEMAPS611,TEMAPE214, TEPGPS574,TEPGPE186	CONTROL AND MANAGEMENT OF RAILWAY SYSTEM CONNECTED TO MICROGRID STATIONS Objective: The main objective of this project is to propose techno-economic method for the energy storage by using Super capacitors in the train.
TEMAPS546,TEMAPS547, TEPGPS513,TEPGPS512	MINIMIZING ENERGY STORAGE UTILIZATION IN A STAND-ALONE DC MICROGRID USING PHOTOVOLTAIC FLEXIBLE POWER CONTROL Objective: The main objective of this project is to regulate the DC link voltage of both BESS and PV system.
TEPGPE168,TEPGPS519 TEMAPS553,TEMAPE194	POWER FACTOR COMPENSATION FOR A SINGLE-PHASE AC-DC HYBRID MICRO-GRID Objective: The main objective of this project is to power flow control strategy of a single-phase AC-DC Hybrid Microgrid
TEMAPE164, TEMAPS479	RESEARCH ON THE CONTROL STRATEGY OF AC/DC INTERLINKING CONVERTERS IN ISLANDED HYBRID MICROGRID Objective: The main objective of this project is to maintain AC bus frequency and DC bus voltage stability and power bidirectional transmission.

TEPGPS449, TEPGPE133	<p>MODELLING AND FAULT PROTECTION ANALYSIS OF A DC MICROGRID USING VOLTAGE SOURCE CONVERTER (VSC)</p> <p>Objective: The main objective of this project is to power electronic devices like GTO to increase switch time. After designing a suitable error detection.</p>
TEMAPS411,TEMAPS412, TEPGPS378,TEPGPS379	<p>ENERGY MANAGEMENT SYSTEM FOR SMALL SCALE HYBRID WIND SOLAR BATTERY BASED MICROGRID</p> <p>Objective: The main objective of this project is to balance the power in solar-wind based hybrid energy storage system.</p>
TEMAPE154	<p>SIMULATION AND FAULT DETECTION TECHNIQUES FOR MULTILEVEL INVERTERS USED IN SMART GRIDS</p> <p>Objective: The main objective of this project is to a number of intelligent control systems for electricity generation as well as increasing the system's energy efficiency.</p>
TEMAPS574, TEPGPS537	<p>DYNAMIC AND TRANSIENT STATE ANALYSIS OF ISLANDED MICROGRID</p> <p>Objective: The main objective of the proposed method is to implement microgrid with the help of renewable energy sources and testing the performance of the system under dynamic and transient states.</p>
TEPGPS335 TEMAPS375	<p>DESIGN AND CONTROL OF MICRO-GRID FED BY RENEWABLE ENERGY GENERATING SOURCES</p> <p>Objective: The main objective of this project is to design and control of Micro-Grid fed by Renewable Energy Generating Sources</p>
TEMAPS492, TEPGPS456	<p>CONTROL OF SOLAR BATTERY STORAGE BASED MICRO GRID</p> <p>Objective: The main objective of this project is to eradicate the utilization of fossil fuels and to promote the usage of renewable energy resources, which are attaining more interest.</p>
TEPGPS403	<p>GROUND FAULT ANALYSIS IN A MICROGRID SCENARIO</p> <p>Objective: The main objective of this project is to analyze the ground fault in a scenario of micro-grid.</p>
TEPGPS401	<p>ESTIMATED DROOP CONTROL FOR PARALLEL CONNECTED VOLTAGE SOURCE INVERTERS</p> <p>Objective: The main objective of this project is to currently inverters with different design techniques are being used as an interface between RES and main utility grid.</p>
TEPGPS194, TEMAPS233	<p>PERFORMANCE ANALYSIS OF SOLAR PV ARRAY AND BATTERY INTEGRATED UNIFIED POWER QUALITY CONDITIONER FOR MICROGRID SYSTEMS</p> <p>Objective: The main objective of this project is to improve the power quality at the load side and supply side and regulate load voltages while maintaining grid current sinusoidal and the power factor close to unity.</p>

TEPGPS510,TEPGPS511, TEMAPS545,TEMAPS544	OPERATION OF HYBRID AC-DC MICRO GRID WITH AN INTERLINKING CONVERTER Objective: The main objective of this project is to the power quality of power sharing in both AC and DC sub grids.
TEGPS131,TEGPS133, TEGPS134,TEMAPS174, TEMAPS175,TEMAPS176	SOLAR PV-BES BASED MICRO-GRID SYSTEM WITH MULTI-FUNCTIONAL VSC Objective: The main objective of this project is maximum power extraction from a PV Array, reactive power compensation, harmonics mitigation and balancing of grid currents.
TEPGPS407	A MODIFIED Q -V DROOP CONTROL FOR ACCURATE REACTIVE POWER SHARING IN DISTRIBUTED GENERATION MICROGRID Objective: The main objective of this project is to reactive power sharing between dgs.
TEPGPS125,TEPGPS126, TEPGPS127,TEPGPS128	DISTRIBUTED INCREMENTAL ADAPTIVE FILTER CONTROLLED GRID INTERACTIVE RESIDENTIAL PHOTOVOLTAIC-BATTERY BASED MICRO-GRID FOR RURAL ELECTRIFICATION Objective: The main objective of this project is to provide continuous supply to the emergency loads, harmonics mitigation, load balancing and power factor improvement.
TEMAPS426, TEPGPS398	AN ISLANDING DETECTION BASED ON DROOP CHARACTERISTIC FOR VIRTUAL SYNCHRONOUS GENERATOR Objective: The main objective of this project is to realize the stable and autonomous operation of micro-grids using the virtual synchronous generator (VSG) concept under planned grid reconfigurations.
TEPGPS374, TEPGPS375	AN ADAPTIVE POWER OSCILLATION DAMPING CONTROLLER FOR A HYBRID AC/DC MICRO GRID Objective: The main objective of this project is able to adjust the gain based on the frequency deviation and the ability to handle more non-linearity in the system dynamics
TEPGPS399	POWER MANAGEMENT STRATEGY BASED ON ADAPTIVE NEURO FUZZY INFERENCE SYSTEM FOR AC MICROGRID Objective: The main objective of this project is to achieve MG power balance, decrease DG fossil fuel to minimum consumption and keep the MG voltage stability and finally tracking the maximum power point (MPP) of each RER.
TEPGPE55, TEMAPE67	A UNIVERSAL CONTROLLER UNDER DIFFERENT OPERATING STATE FOR PARALLEL INVERTER WITH SEAMLESS TRANSFER CAPABILITY Objective: The main objective of this project is to implement a universal controller to operate parallel inverters in both grid-connected (GC) state and standalone (SA) state and to ensure seamless transfer between them without reconfiguring the control structure.
TEMAPS484,	A NOVEL THREE-PHASE CLLC RESONANT DC-DC CONVERTER IN DC

TEPGPS453	<p>MICROGRIDS</p> <p>Objective: The main objective of this project is to achieve bidirectional power transmission between the DC microgrid and Electric-Vehicle.</p>
TEPGPE56, TEMAPE68	<p>CASCADED DROOP AND INVERSE DROOP REGULATION FOR TWO-LAYER COORDINATED POWER FLOW CONTROL IN SERIES-CONNECTED POWER CELLS</p> <p>Objective: The main objective of this project is to obtain the flexible power regulation in a fully voltage control manner.</p>

## EEE CONTROL SYSTEMS IEEE TITLES – CONTROL SYSTEMS DOMAIN

TEMAPS599,TEMACS64, TEPGPS562,TEPGCS58	<p>SLIDING MODE CONTROL FOR GRID INTEGRATION OF WIND POWER SYSTEM BASED ON DIRECT DRIVE PMSG</p> <p>Objective: The main objective of this project is to provide the dynamic performance during low/high voltage conditions.</p>
TEMAPS605,TEMACS65, TEPGPS568,TEPGCS59	<p>POWER AND CURRENT LIMITING STRATEGY BASED ON DROOP CONTROLLER WITH FLOATING CHARACTERISTIC FOR GRID-CONNECTED DISTRIBUTED GENERATION</p> <p>Objective: The main objective of this project is to improve the performance of grid connected distribution generations by employing power and current limiting strategy.</p>
TEMAPS565,TEMAED147, TEPGPS530,TEPGED141, TEMAPS583,TEMACS61, TEPGPS546,TEPGCS55	<p>ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM</p> <p>Objective: The main objective of this project is comprehensive dynamic analysis for a renewable energy based water pumping system.</p>
TEMAPS597,TEMACS63, TEPGCS57,TEPGPS560	<p>DC BUS VOLTAGE CONTROL OF WIND POWER INVERTER BASED ON FIRST-ORDER LADRC</p> <p>Objective: The main objective of this project is to improve the stability of the DC side voltage of the direct-drive permanent magnet wind power grid-connected inverter by using First-Order LADRC.</p>
TEMACS67, TEMAPE217, TEPGCS61, TEPGPE189	<p>DESIGN AND CASCADE PI CONTROLLER-BASED ROBUST MODEL REFERENCE ADAPTIVE CONTROL OF DC-DC BOOST CONVERTER</p> <p>Objective: The main objective of this project is to track the desired signals and regulate the plant process variables in the most beneficial and optimized way without delay and overshoot.</p>
TEMACS60	<p>APPLICATION OF PID CONTROLLER IN CONTROLLING REFRIGERATOR TEMPERATURE</p> <p>Objective: The main objective of this project is to analyze and compare the performance between PID Controller and ON-OFF Controller in maintaining the inner temperature of the refrigerator</p>
	<p>APPLIANCES MODELING AND SIMULATION: A VIRTUAL PLATFORM APPLIED FOR</p>

TEMAPS407	ARC FAULT TESTING Objective: The main objective of this paper is to calculate current and line voltage for the development of an arc fault detector.
TEPGCS50	ADAPTIVE AND FUZZY PI CONTROLLERS DESIGN FOR FREQUENCY REGULATION OF ISOLATED MICROGRID INTEGRATED WITH ELECTRIC VEHICLES Objective: The main objective of this paper is the development of electric vehicles and renewable energy sources are to build a sustainable and green power system.
TEMSCS54	MODELLING AND CONTROLLER DESIGN FOR TEMPERATURE CONTROL OF POWER PLANT HEAT EXCHANGER Objective: The main objective of this paper is to is produce sustain wide range of temperature and pressure.
TEPGCS27, TEMACS33	A NEW HYBRID METHOD BASED ON FUZZY LOGIC FOR MAXIMUM POWER POINT TRACKING OF PHOTOVOLTAIC SYSTEMS Objective: The main objective of this paper is to track the maximum power point of PV to decrease computation power requirement, while increasing the speed and efficiency of the tracking.
TEMACS55	DYNAMIC STABILITY ENHANCEMENT OF POWER SYSTEM USING FUZZY LOGIC BASED POWER SYSTEM STABILIZER Objective: The main objective of this paper is to improve the Dynamic Stability of Power System using Fuzzy Logic Based Power System Stabilizer.
TEMSCS56	USE OF THE GENETIC ALGORITHM BASED FUZZY LOGIC CONTROLLER FOR LOAD FREQUENCY CONTROL IN A TWO AREA INTER CONNECTED POWER SYSTEM Objective: The main objective of this paper is to control the load frequency of power systems.
TEMACS57	MODEL PREDICTIVE CONTROL FOR FREQUENCY CONTROL OF SINGLE AREA NETWORK OF POWER SYSTEM {CONCEPT-BASED} Objective: The main objective of this paper is to achieve a similar control effect with the reduced torque ripple.

## EEE POWER ELECTRONICS IEEE TITLES

S.NO	TITLE	DOMAIN
TEMAPE209,TEMAPE210, TEMAPS589,TEPGPS52, TEPGPE181,TEPGPE182	TWO-STAGE CONVERTER STANDALONE PV-BATTERY SYSTEM BASED ON VSG CONTROL Objective: The main objective of this project is to adjust the inverter output and realize the maximum power of the PV scheme by using VSG controller.	DC – AC CONVERTERS
TEMAPE225,	A UNIFIED ACTIVE DAMPING FOR GRID AND CONVERTER CURRENT	AC-DC

TEPGPE197	<p>FEEDBACK IN ACTIVE FRONT END CONVERTERS</p> <p>Objective: The main objective of this project is to reduce the switching harmonics and improve the system performance.</p>	CONVERTERS
TEMAPS579,TEMAPE206, TEMAPE207,TEPGPE178, TEPGPE179,TEPGPS542	<p>SOLAR POWER GENERATION SYSTEM WITH POWER SMOOTHING FUNCTION</p> <p>Objective: The main objective of this project is to increase power efficiency and smoothens power fluctuations in the Solar Power generation system.</p>	AC-DC CONVERTERS
TEMAPE220,TEPGPE192	<p>MODELING AND CONTROL OF SINGLE-STAGE QUADRATIC-BOOST SPLIT SOURCE INVERTERS</p> <p>Objective: The main objective of this project is to develop the recently proposed Split-Source Inverter (SSI) topology for improving its boosting characteristics.</p>	DC – AC CONVERTERS
CONCEPT-BASED	<p>MULTI-PORT DC-AC CONVERTER WITH HELP OF BATTERY AND SOLAR</p>	DC – AC CONVERTERS
TEMAPS469	<p>NANO GRID TECHNIQUES FOR FARMING RELIABLE &amp; RESIDENTIAL GRID</p> <p>Objective: The main objective of this project is to maintain power management in Nano-grid.</p>	DC – AC CONVERTERS
TEMAPS462	<p>HYBRID WIND/PV/BATTERY ENERGY MANAGEMENT-BASED INTELLIGENT NON-INTEGGER CONTROL FOR SMART DC-MICROGRID OF SMART UNIVERSITY</p> <p>Objective: The main objective of this project is to controlling the source-side converters (sscs) to extract the maximum power from the renewable energy sources (wind and PV) using the proposed IFO-PID.</p>	DC – AC CONVERTERS
TEPGPE156, TEPGPS498, TEMAPE183, TEMAPS532	<p>CONTROL OF A THREE-PHASE POWER CONVERTER CONNECTED TO UNBALANCED POWER GRID IN A NON-CARTESIAN OBLIQUE FRAME</p> <p>Objective: The main objective of the proposed method is, to avoid multiple transformations of positive and negative sequence of current, oscillatory terms and gives better results without overregulation.</p>	DC – AC CONVERTERS
TEMAPE158,TEMAPE159, TEPGPE130,TEPGPE131	<p>MULTI-PORT DC-AC CONVERTER WITH DIFFERENTIAL POWER PROCESSING DC-DC CONVERTER AND FLEXIBLE POWER CONTROL FOR BATTERY ESS INTEGRATED PV SYSTEMS</p> <p>Objective: The main objective of this project is to sustain the continuous power supply to the loads, energy storage systems (ESS), such as batteries, are usually integrated with PV systems.</p>	DC – AC CONVERTERS

TEMAPE175 TEPGPE145	ADVANCED PET CONTROL FOR VOLTAGE SAGS UNBALANCED CONDITIONS USING PHASE-INDEPENDENT VSC RECTIFICATION Objective: The main objective of this project is to eliminate the harmonics balancing the currents and maintain the unity power factor	DC – AC CONVERTERS
TEPGPS443, TEPGPS444, TEMAPS473, TEMAPS474	IMPLEMENTATION OF FREQUENCY INTEGRATED MULTI ORDER GENERALIZED INTEGRATOR FOR SOLAR ENERGY SOURCED GRID Objective: The main objective of this project is to attenuate the higher-order and sub-order harmonic components from distorted load currents, even when the load currents are linear or nonlinear and balanced or unbalanced.	DC – AC CONVERTERS
TEPGPE146	HIGHLY RELIABLE SINGLE-PHASE AC TO THREE-PHASE AC CONVERTER WITH A SMALL LINK CAPACITOR Objective: The main objective of this project is highly reliable single-phase ac to three phase ac converter with a small link capacitor	DC – AC CONVERTERS
TEMAPS499	STABILITY EVALUATION OF AC/DC HYBRID MICROGRIDS CONSIDERING BIDIRECTIONAL POWER FLOW THROUGH THE INTERLINKING CONVERTERS Objective: The objective of this paper is power flow direction on the small-signal stability of islanded droop-based hmg.	DC – AC CONVERTERS
TEPGPE135, TEPGPE152, TEMAPE166, TEMAPE180	A SINGLE PHASE, SINGLE STAGE AC-DC MULTILEVEL LLC RESONANT CONVERTER WITH POWER FACTOR CORRECTION Objective: The main objective of this project is that converter uses bridgeless rectification scheme for better efficiency and the power factor.	DC – AC CONVERTERS
TEMAPE156	A NEW THREE-PHASE MULTILEVEL DC-LINK INVERTER TOPOLOGY WITH REDUCED SWITCH COUNT FOR PHOTOVOLTAIC APPLICATIONS Objective: The main objective of this project is to a new MLI topology with reduced number of switches for photovoltaic applications.	DC – AC CONVERTERS
TEPGPE62, TEMAPE74	MULTIFUNCTION CONTROL STRATEGY FOR SINGLE-PHASE AC/DC POWER CONVERSION SYSTEMS WITH VOLTAGE SENSOR LESS POWER DECOUPLING FUNCTION Objective: The main objective of this project is to a novel voltage-sensor less controller for single-phase AC/DC power conversion systems with self-adaptive power decoupling function.	DC – AC CONVERTERS
TEMAPE157	ADAPTIVE RESONANT ENERGY REALIZATION IN FB -ZCS-DC CONVERTER CIRCUIT USING DUAL CAPACITOR CIRCUIT Objective: The main objective of this project is to improve	DC – AC CONVERTERS

	efficiency, power density, reduced switching noise and EMI etc... Over hard switched converters.	
TEMAPE56	A NOVEL SINGLE STAGE BUCK BOOST TRANSFORMER LESS INVERTER FOR 1 PHASE GRID CONNECTED SOLAR PV SYSTEMS Objective: the main objective of this paper is to eliminate the leakage currents and track the maximum power point even under the wide variation of input PV voltage.	DC – AC CONVERTERS
TEMAPS04,TEMAPS03,TEREPS19_02,TEREPS19_03,TEREPS19_04,TEMAPE05,TEMAPE06	GRID CONNECTED PV COGENERATION USING BACK TO BACK VOLTAGE SOURCE CONVERTERS Objective: The main objective of this paper is simple and efficient for a grid-connected wind-photovoltaic (PV) cogeneration system.	DC – AC CONVERTERS
TEMAPE155	Z-SOURCE INVERTER Objective: The main objective of this paper is an impedance-source power converter and its control method for implementing dc-to-ac, ac-to-dc, ac-to-ac, and dc-to-dc power conversion.	DC – AC CONVERTERS
TEMAPS602,TEMAPE211,TEPGPS565,TEPGPE183	BIDIRECTIONAL POWER CONTROL STRATEGY FOR SUPER CAPACITOR ENERGY STORAGE SYSTEM BASED ON MMC DC-DC CONVERTER Objective: The main objective of this project is to employ a bidirectional power control strategy for Super Capacitor Energy Storage System Based on MMC DC-DC Converter.	DC-DC CONVERTERS
TEMAPS577,TEMAPE204,TEPGPS540,TEPGPE176	A NOVEL AND HIGH-GAIN SWITCHED-CAPACITOR AND SWITCHED-INDUCTOR-BASED DC/DC BOOST CONVERTER WITH LOW INPUT CURRENT RIPPLE AND MITIGATED VOLTAGE STRESSES Objective: The main objective of this project is to obtain low input current ripples and mitigate the voltage stresses.	DC-DC CONVERTERS
TEMAPS611,TEMAPE214,TEPGPS574,TEPGPE186	CONTROL AND MANAGEMENT OF RAILWAY SYSTEM CONNECTED TO MICROGRID STATIONS Objective: The main objective of this project is to propose techno-economic method for the energy storage by using Super capacitors in the train.	DC-DC CONVERTERS
TEMAPE224,TEPGPE196	HIGH EFFICIENCY AND VOLTAGE CONVERSION RATIO BIDIRECTIONAL ISOLATED DC-DC CONVERTER FOR ENERGY STORAGE SYSTEM Objective: The main objective of this project is to attain high efficiency and voltage conversion ratio of a bidirectional isolated dc-dc converter for energy storage system.	DC-DC CONVERTERS
TEMAPS579,TEMAPE206,	SOLAR POWER GENERATION SYSTEM WITH POWER SMOOTHING FUNCTION	DC-DC CONVERTERS

TEMAPE207,TEPGPE178, TEPGPE179,TEPGPS542	Objective: The main objective of this project is to increase power efficiency and smoothens power fluctuations in the Solar Power generation system.	RS
TEMACS67,TEMAPE217, TEPGCS61,TEPGPE189	DESIGN AND CASCADE PI CONTROLLER-BASED ROBUST MODEL REFERENCE ADAPTIVE CONTROL OF DC-DC BOOST CONVERTER Objective: The main objective of this project is to track the desired signals and regulate the plant process variables in the most beneficial and optimized way without delay and overshoot.	DC-DC CONVERTERS
TEMAPE209,TEMAPE210, TEMAPS589,TEPGPS552, TEPGPE181,TEPGPE182	TWO-STAGE CONVERTER STANDALONE PV-BATTERY SYSTEM BASED ON VSG CONTROL Objective: The main objective of this project is to adjust the inverter output and realize the maximum power of the PV scheme by using VSG controller.	DC-DC CONVERTERS
TEMAPE203	HIGH STEP-UP FULL BRIDGE DC-DC CONVERTER WITH MULTI-CELL DIODE-CAPACITOR NETWORK Objective: The main objective of the proposed method is to avoid inrush current issue and achieves almost zero output voltage ripples which reducing the inductance in output LC filter.	DC-DC CONVERTERS
TEMAPE201 TEPGPE174	A LOSSLESS TURN-ON SNUBBER FOR REDUCING DIODE REVERSE RECOVERY LOSSES IN BIDIRECTIONAL BUCK/BOOST CONVERTER Objective: The main objective of this project is to introducing a reducing diode reverse recovery loss in bidirectional buck boost converter	DC-DC CONVERTERS
TEMAPE146, TEPGPE122	ANALYSIS, MODELING AND IMPLEMENTATION OF A SWITCHING BI-DIRECTIONAL BUCK-BOOST CONVERTER BASED ON ELECTRIC VEHICLE HYBRID ENERGY STORAGE FOR V2G SYSTEM Objective: The main objective of this paper is to improve the stability of the hybrid energy storage system.	DC – DC CONVERTERS
TEPGPE68, TEMAPE82	A NOVEL CASCADED CONTROL TO IMPROVE STABILITY AND INERTIA OF PARALLEL BUCK-BOOST CONVERTERS IN DC MICROGRID Objective: The main objective of this paper is a control strategy for dual-source buck buck-boost fused converter (DSBBFC), utilizing two inputs of different dc levels.	DC – DC CONVERTERS
TEPGPE65, TEMAPE78	REACTIVE POWER OPTIMIZATION CONTROL FOR BIDIRECTIONAL DUAL-TANK RESONANT DC-DC CONVERTERS FOR FUEL CELLS SYSTEMS Objective: The main objective of this paper is to provide a new control scheme for reactive power optimization at a given	DC – DC CONVERTERS

	active power output.	
TEMAPS608,TEMAPS609, TEMAPE213, TEPGPS571, TEPGPS572,TEPGPE185	ENERGY MANAGEMENT STRATEGY OF AC/DC HYBRID MICRO GRID BASED ON SOLID-STATE TRANSFORMER Objective: The main objective of the proposed method is to avoid the voltage fluctuation and power mismatch by using AC/DC hybrid microgrid based on solid-state transformer.	AC-DC CONVERTERS
TEPGPE168,TEPGPS519 TEMAPS553,TEMAPE194	POWER FACTOR COMPENSATION FOR A SINGLE-PHASE AC-DC HYBRID MICRO-GRID Objective: The main objective of this project is to power flow control strategy of a single-phase AC-DC Hybrid Microgrid	AC-DC CONVERTERS

## EEE POWER ELECTRONICS IEEE TITLES – MULTILEVEL INVERTERS DOMAIN

TEMAPS614,TEMAPE223, TEPGPS577,TEPGPE195	A GENERALIZED HIGH GAIN MULTILEVEL INVERTER FOR SMALL SCALE SOLAR PHOTOVOLTAIC APPLICATIONS Objective: The main objective of this project is to increase the low voltage levels of PV panels by using high gain dc-dc converters, which are also known as front-end converters.
TEMAPE219, TEPGPE191	A NEW SINGLE-SOURCE NINE-LEVEL QUADRUPLE BOOST INVERTER (NQBI) FOR PV APPLICATION Objective: The main objective of this project is to evaluate the performance of the nine-level quadruple boost inverter (NQBI) topology.
TEPGPE135,TEPGPE152, TEMAPE166,TEMAPE180	A SINGLE PHASE, SINGLE STAGE AC-DC MULTILEVEL LLC RESONANT CONVERTER WITH POWER FACTOR CORRECTION Objective: The main objective of this project is that converter uses bridgeless rectification scheme for better efficiency and the power factor.
TEMAPE154	SIMULATION AND FAULT DETECTION TECHNIQUES FOR MULTILEVEL INVERTERS USED IN SMART GRIDS Objective: The main objective of this project is to a number of intelligent control systems for electricity generation as well as increasing the system's energy efficiency.
	FUZZY LOGIC CONTROL FOR SOLAR PV FED MODULAR MULTILEVEL INVERTER TOWARDS MARINE WATER PUMPING APPLICATIONS Objective: The main objective of this project aims to control the Induction Motor (IM) drive using intelligent techniques towards marine water pumping applications.
TEPGPS442, TEMAPS472	HIGH REACTIVE POWER COMPENSATION ACCURACY FOR CASCADED H-BRIDGE INVERTER BASED DECOUPLING FEED-FORWARD CURRENT VECTOR CONTROLLER

	Objective: The main objective of this project is to define a control scheme and its transfer function in order to achieve low switching frequency and high-bandwidth power control of MCHI.
TEMAPE154	SIMULATION AND FAULT DETECTION TECHNIQUES FOR MULTILEVEL INVERTERS USED IN SMART GRIDS Objective: The main objective of this paper is to a number of intelligent control systems for electricity generation as well as increasing the system's energy efficiency.
TEMAPS497, TEPGPS461, TEPGPE134	SIMULATION MODEL OF H6 TRANSFORMER LESS SINGLE PHASE FULL BRIDGE PV GRID TIED INVERTERS Objective: The main objective of this paper is to implement the safety measures of leakage currents in transformer less inverters in photovoltaic generation.
TEPGED125,TEPGPE167, TEMAED129,TEMAPE193	A FAULT TOLERANT FIVE-LEVEL INVERTER TOPOLOGY WITH REDUCED COMPONENT COUNT FOR OPEN-END IM DRIVES Objective: The main objective of this paper is to tolerate the faults and reduce the components count to run the drive applications without any interruptions.
TEPGPE127	SOLAR PV AND BATTERY STORAGE INTEGRATION USING A NEW CONFIGURATION OF A THREE-LEVEL NPC INVERTER WITH ADVANCED CONTROL STRATEGY Objective: The main objective of this paper is the novel configuration of a three-level neutral-point-clamped (NPC) inverter that can integrate solar photovoltaic (PV) with battery storage in a grid-connected system.
TEPGPE128	NOVEL CIRCUIT AND METHOD FOR FAULT RECONFIGURATION IN CASCADED H-BRIDGE MULTI-LEVEL INVERTERS Objective: The main objective of this paper is to use for fault reconfiguration in Cascaded H _ Bridge Multilevel Inverters
TEPGPE129	A NOVEL ASYMMETRICAL 21-LEVEL INVERTER FOR SOLAR PV ENERGY SYSTEM WITH REDUCED SWITCH COUNT Objective: The main objective of this paper is to presents a novel asymmetrical 21-level multilevel inverter topology for solar PV application.

## EEE ELECTRICAL DRIVES IEEE TITLES – AC DRIVES DOMAIN

TEMACS69, TEMAED154, TEPGCS63, TEPGED148	SLIDING MODE PREDICTIVE CURRENT CONTROL OF PERMANENT MAGNET SYNCHRONOUS MOTOR WITH CASCADED VARIABLE RATE SLIDING MODE SPEED CONTROLLER Objective: The main objective of this project is to propose a sliding mode control scheme for a direct-drive PMSG based wind energy conversion system.
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TEMAED155, TEPGED149	TORQUE RIPPLE REDUCTION FOR BLDC PERMANENT MAGNET MOTOR DRIVE USING DC-LINK VOLTAGE AND CURRENT MODULATION Objective: The main objective of this project is to reduce the torque ripple and improve the performance of the system by using DC-link voltage and current modulation.
TEMAPS565,TEMAED147, TEPGPS530,TEPGED141, TEMAPS583,TEMACS61, TEPGPS546,TEPGCS55	ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM Objective: The main objective of this Project Is Comprehensive Dynamic Analysis For A Renewable Energy Based Water Pumping System.
TEPGED87, TEMAED84	BIDIRECTIONAL HARMONIC CURRENT CONTROL OF BRUSHLESS DOUBLY FED MOTOR DRIVE SYSTEM BASED ON A FRACTIONAL UNIDIRECTIONAL CONVERTER UNDER A WEAK GRID. Objective: The Main objective of this project is proposes the brushless doubly fed machine (BDFM) drive system based on a fractional unidirectional converter is a promising low-cost variable-speed drive system.
TEPGED88, TEMAED85	COMBINED SPEED AND CURRENT TERMINAL SLIDING MODE CONTROL WITH NONLINEAR DISTURBANCE OBSERVER FOR PMSM DRIVE. Objective: Main objective of this project aims to achieve the speed and current stabilizing control for a PMSM drive under different nonlinear disturbances.
TEMAPS565, TEMAED147, TEPGPS530, TEPGED141	ENHANCED CONTROL AND POWER MANAGEMENT FOR A RENEWABLE ENERGY-BASED WATER PUMPING SYSTEM Objective: The main objective of this project is comprehensive dynamic analysis for a renewable energy based water pumping system
TEPGPS441, TEMAPS467	GRID-CONNECTED INDUCTION MOTOR USING A FLOATING DC-LINK CONVERTER UNDER UNBALANCED VOLTAGE SAG. Objective: The main objective of the project is to eliminate unbalanced PW current, distorted CW current and oscillations of the PW active or reactive power were analyzed.
TEMAED97	INTEGRATED AC TO AC CONVERTERS FOR SINGLE-PHASE INPUT TO TWO-PHASE OUTPUT MOTOR DRIVES Objective: The main objective of the project is an integrated ac/ac converter with a single-phase input and a two-phase output which reduces the switch count to six is proposed
TEMAED108. TEPGED108	SPEED CONTROL FOR SRM DRIVE SYSTEM BASED ON SWITCHING VARIABLE PROPORTIONAL DESATURATION PI REGULATOR Objective: The main objective of the project is superior in tracking performance, anti-disturbance performance and speed range.
TEMAED126, TEPGED122	ADAPTIVE SLIDING-MODE-BASED SPEED CONTROL IN FINITE CONTROL SET MODEL PREDICTIVE TORQUE CONTROL FOR INDUCTION MOTORS

	Objective: The main objective of the project is to improve the robustness of the Finite Control Set Model Predictive Torque Control for Induction Motors.
TEMAED122, TEPGED118	A NEW $\Delta$ -MRAS METHOD FOR MOTOR SPEED ESTIMATION Objective: The main objective of the project is to estimate the motor speed by utilizing the per-phase motor equivalent circuit.
TEMAED94, TEPGED96	ADAPTIVE HYBRID GENERALIZED INTEGRATOR BASED SMO FOR SOLAR PV ARRAY FED ENCODER LESS PMSM DRIVEN WATER PUMP. Objective: The Main Objective of this Project is to increase its accuracy, reliability of the PMSM using Adaptive Hybrid Generalized Integrator Based SMO.
TEMAED96	HIGH PERFORMANCE RELUCTANCE SYNCHRONOUS MOTOR DRIVE USING FIELD ORIENTED CONTROL Objective: The Main Objective of this Project is to improve the performance of Reluctance Synchronous Motors (RSM) using Field Oriented Control.
TEMAED128, TEPGED124	IMPROVED NON-SINGULAR FAST TERMINAL SLIDING MODE CONTROL WITH DISTURBANCE OBSERVER FOR PMSM DRIVES Objective: The Main Objective of this Project is to suppress the chattering phenomenon and improve tracking performance of the conventional non-singular fast terminal sliding mode control (NFTSMC).
TEMAED109 TEPGED109	AN IMPROVED TECHNIQUE FOR ENERGY-EFFICIENT STARTING AND OPERATING CONTROL OF SINGLE PHASE INDUCTION MOTORS Objective: The Main Objective of this Project is to enable the symmetrical and balanced operation of SPIM at all the operating points over the entire speed-range to improve its performance.
TEMAED123, TEPGED119	REAL-TIME IMPLEMENTATION OF EXTENDED KALMAN FILTER OBSERVER WITH IMPROVED SPEED ESTIMATION FOR SENSORLESS CONTROL Objective: The Main Objective of this Project is an investigation of on Improved Extended Kalman Filter (IEKF) to improve the IM sensorless control in motion control applications.
TEMAED100 TEPGED100	AN ENHANCED LINEAR ACTIVE DISTURBANCE REJECTION CONTROLLER FOR HIGH PERFORMANCE PMSM DRIVE CONSIDERING IRON LOSS Objective: The Main Objective of this Project is The proposed algorithm involves an estimation of the total disturbance that aims to reduce design and execution complexity, particularly in the higher-order model.
TEMAED104 TEPGED104	CURRENT AND SPEED SENSOR FAULT DIAGNOSIS METHOD APPLIED TO INDUCTION MOTOR DRIVE Objective: The Main Objective of this Project A simple control algorithm has been adopted to budget the power flow between the input sources. Finally, the operation of this converter has been verified through a low

	voltage prototype model.
TEMAED126, TEPGED122	MODEL PREDICTIVE CONTROL-BASED DIRECT TORQUE CONTROL FOR MATRIX CONVERTER-FED INDUCTION MOTOR WITH REDUCED TORQUE RIPPLE Objective: The Main Objective of this Project is to achieve a similar control effect with the reduced torque ripple.
TEMAED138, EMAED139, TEPGED132, TEPGED133, TEPGED25, TEMAED24	SENSOR LESS PREDICTIVE CONTROL OF SPMSM DRIVEN LIGHT EV DRIVE USING MODIFIED SPEED ADAPTIVE SUPER TWISTING SLIDING MODE OBSERVER WITH MAF-PLL Objective: The Main Objective of this Project is to improve the reliability and reduce the cost of an Electric Vehicle for achieving a smooth and successful wide speed range using sensorless control.
TEMAED142, TEMACS59, TEPGED136, TEPGCS53	DEVELOPMENT OF DOUBLE CLOSED LOOP VECTOR CONTROL USING MODEL PREDICTIVE CONTROL FOR PERMANENT MAGNET SYNCHRONOUS MOTOR Objective: The Main Objective of this Project is to get better dynamic response by tracking the current and resisting the load disturbance.
TEPGPS472	PEAK CURRENT DETECTION STARTING BASED POSITION SENSOR LESS CONTROL OF BLDC MOTOR DRIVE FOR PV ARRAY FED IRRIGATION PUMP. Objective: The main objective of this project is to start the permanent magnet brushless direct current (PMBLDC) motor with exact commutation using position sensor less control mode.
TEMAED145 TEPGED139	DIRECT INSTANTANEOUS TORQUE CONTROL OF THE SWITCHED RELUCTANCE MOTOR FOR ELECTRIC VEHICLES APPLICATIONS USING FUZZY LOGIC CONTROL Objective: The main objective of this project is to improve the motor performance and reduce the torque ripples compared to other techniques such as Direct Instantaneous Torque Control
TEMAED101 TEPGED101	A NOVEL DC-LINK VOLTAGE FEEDBACK ACTIVE DAMPING CONTROL METHOD FOR IPMSM DRIVES WITH SMALL DC-LINK CAPACITORS Objective: The main objective of this project is to reduce the digital control delay and improve the damping current precision.
TEPGPS497 TEMAPS537 TEPGPS463 TEMAPS498	ANALYSIS OF FRACTIONAL ORDER SLIDING MODE CONTROL IN A D-STATCOM INTEGRATED POWER DISTRIBUTION SYSTEM Objective: To reduce total harmonic distortion (THD) and voltage unbalance factor (VUF) of the grid voltage due to disturbances like the voltage fluctuations.
TEPGED40,TEMAED38	PASSIVITY-BASED MODEL PREDICTIVE CONTROL OF THREE-LEVEL INVERTER-FED INDUCTION MOTOR Objective: The main objective of this paper is to improving the robustness under the condition of unavoidable measuring noises and parameter variation as well as reducing the computational burden.
TEMAPS405,TEMAED72,	SENSOR LESS FIELD ORIENTED SMCC BASED INTEGRAL SLIDING MODE FOR

TEPGPS373,TEPGED76	<p>SOLAR PV BASED INDUCTION MOTOR DRIVE FOR WATER PUMPING</p> <p>Objective: The main objective of this paper is to regulate the DC link voltage, induction motor power and speed of the motor.</p>
TEMAED75,TEPGED75	<p>HYSTERESIS CONTROLLED QUASI Z-SOURCE INVERTER FED INDUCTION MOTOR DRIVE SYSTEM WITH ENHANCED RESPONSE</p> <p>Objective: The main objective of this paper is to develop a closed-loop controlled-QZSI-fed induction motor framework that provides a steady rotor speed.</p>
TEMAED74,TEPGED78	<p>STATOR RESISTANCE ESTIMATION USING DC INJECTION WITH REDUCED TORQUE RIPPLE IN INDUCTION MOTOR SENSOR LESS DRIVES</p> <p>Objective: The main objective of this paper is to reduce torque ripples in the induction motor.</p>
TEMAED73,TEPGED77	<p>DESIGN AND ANALYSIS OF ELECTRICAL BRAKING TORQUE LIMIT TRAJECTORY FOR REGENERATIVE BRAKING IN ELECTRIC VEHICLES WITH PMSM DRIVE SYSTEMS</p> <p>Objective: The main objective of this paper is to improve the regenerative braking of electric vehicles based on a regenerative power analysis, an electrical braking torque limit trajectory is proposed</p>
TEPGED25,TEMAED24	<p>SENSOR LESS PREDICTIVE CURRENT CONTROL OF PMSM EV DRIVE USING DSOGI-FLL BASED SLIDING MODE OBSERVER</p> <p>Objective: The main objective of this paper is to eliminate lower order harmonics, DC offset, saturation, a sliding mode observer (SMO) with a dual second order generalized integrator frequency locked loop is proposed for a surface mounted Permanent Magnet Synchronous Motor (PMSM) based electric vehicle (EV) drive.</p>
TEPGED115,TEMAED119	<p>AN EFFECTIVE PREDICTIVE TORQUE CONTROL SCHEME FOR PMSM DRIVE WITHOUT INVOLVEMENT OF WEIGHTING FACTORS</p> <p>Objective: The main objective of this paper is eliminating the weighting factors in Predictive Torque Control (PTC) method for two-level Voltage Source Inverter (VSI) fed Permanent Magnet Synchronous Motor.</p>
TEMAED144,TEPGED138	<p>MODELLING AND SIMULATION OF SWITCHED RELUCTANCE GENERATOR FOR AIRCRAFT POWER SYSTEMS</p> <p>Objective: The main objective of this project is to modulate and simulate the Switched Reluctance Generator for aircraft applications.</p>
TEMAED79,TEPGED83	<p>SENSOR LESS CONTROL FOR FIVE-PHASE IPMSM DRIVES BY INJECTING HF SQUARE-WAVE VOLTAGE SIGNAL INTO THIRD HARMONIC SPACE</p> <p>Objective: The main objective of this paper is to obtain further fault-tolerance, a new high frequency (HF) signal-injection-based sensorless control strategy for five-phase IPMSM drives.</p>
TEPGPS151,TEPGED19,TEMAPS195,TEMAED18	<p>SINGLE STAGE AUTONOMOUS SOLAR WATER PUMPING SYSTEM USING PMSM DRIVE</p>

	Objective: The main objective of this paper is to improve the torque response of the system, fast maximum power point tracking (MPPT) and eliminates the need of intermediate stage DC-DC converter.
TEMAED130, TEPGED126	AN APPROACH TOWARDS EXTREME FAST CHARGING STATION POWER DELIVERY FOR ELECTRIC VEHICLES WITH PARTIAL POWER PROCESSING Objective: The main objective of this paper is to eliminate redundant power conversion by making use of partial power rated dc-dc converters to charge the individual evs.
TEPGPS159,TEPGED20, TEMAPS202,TEMAED19	EMULATION OF WIND TURBINE SYSTEM USING VECTORCONTROLLED INDUCTION MOTOR DRIVE Objective: The main objective of this paper is using of feed forward compensation will reduce the disturbances in the torque, owing to its poor disturbance rejection capability
TEPGPE57, TEMAPE69	CONTROL FOR POWER CONVERTER OF SMALL-SCALE SWITCHED RELUCTANCE WIND POWER GENERATOR Objective: The main objective of this paper is to improve the utilization efficiency of small-scale wind power generation, by proposing a step control scheme.
TEMBMA3149, TEMAED80	PROTECTION OF THREE PHASE INDUCTION MOTOR USING EMBEDDED SYSTEM Objective: The main objective of this paper is to protect the three-phase induction motor using embedded System.
TEPGED120, TEMAED124	AN ADAPTIVE IDENTIFICATION OF ROTOR TIME CONSTANT FOR SPEED-SENSOR LESS INDUCTION MOTOR DRIVES: A CASE STUDY FOR SIX-PHASE INDUCTION MACHINE Objective: The main objective of this paper is to provide a parallel estimation system of the rotor time constant and the rotor speed in sensor less IFOC of induction machine.
TEPGED28, TEMAED27	VARIABLE SPEED OPERATION OF BRUSHLESS DOUBLY-FED RELUCTANCE MACHINE DRIVE USING MODEL PREDICTIVE CURRENT CONTROL TECHNIQUE Objective: The main objective of this paper is to accomplish an accurate and fast drive control, model predictive control (MPC) is considered for variable speed operation of Brushless Doubly-Fed Reluctance Machine Drive.
TEPGED123, TEMAED127, TEPGPS507, TEMAPS541	MODEL PREDICTIVE DIRECT POWER CONTROL OF DOUBLY FED INDUCTION GENERATORS UNDER BALANCED AND UNBALANCED NETWORK CONDITIONS Objective: The main objective of this paper is to control the power of high performance DFIG under both balanced and unbalanced network.
TEPGED84	DEVELOPMENT OF AN ELECTRIC VEHICLE SYNCHRONOUS RELUCTANCE MOTOR DRIVE Objective: The main objective of this paper is the bilateral DC/DC converter is used as an interface between the battery and the motor

	drive.
TEPGPS506, TEPGED116, TEMAPS540, TEMAED120	DIRECT POWER CONTROL OF SHUNT ACTIVE POWER FILTER USING SPACE VECTOR MODULATION BASED ON SUPER TWISTING SLIDING MODE CONTROL Objective: The main objective of this paper is to compensate undesirable harmonic components caused by nonlinear loads.
TEMAED81	BATTERY AND SUPER CAPACITOR FED BLDC MOTOR DRIVE FOR ELECTRICAL VEHICLE APPLICATIONS Objective: The main objective of this paper is to run an electrical vehicle with help of Battery & super capacitor. And the motor used in EV are BLDC motor
TEPGED28, TEMAED27	VARIABLE SPEED OPERATION OF BRUSHLESS DOUBLY-FED RELUCTANCE MACHINE DRIVE USING MODEL PREDICTIVE CURRENT CONTROL TECHNIQUE Objective: The main objective of this paper is to accomplish an accurate and fast drive control, model predictive control (MPC) is considered for variable speed operation of Brushless Doubly-Fed Reluctance Machine Drive.
TEPGED125,TEPGPE167, TEMAED129,TEMAPE193	A FAULT TOLERANT FIVE-LEVEL INVERTER TOPOLOGY WITH REDUCED COMPONENT COUNT FOR OPEN-END IM DRIVES Objective: The main objective of this paper is to tolerate the faults and reduce the components count to run the drive applications without any interruptions.
TEMAED82	AN IMPROVED DIRECT TORQUE CONTROL OF THREE LEVEL DUAL INVERTER FED OPEN-ENDED WINDING INDUCTION MOTOR DRIVE BASED ON MODIFIED LOOK-UP TABLE Objective: The main objective of this paper is to nullify flux instability at zero speed, proper active vvs are placed at hysteresis flux +1 and torque 0 condition in modified look-up table.
TEMAED152, TEPGED146	PERFORMANCE ANALYSIS OF DIRECT TORQUE CONTROL (DTC) FOR SYNCHRONOUS MACHINE PERMANENT MAGNET (PMSM) Objective: The main object of this project is direct torque control of permanent magnet synchronous machine.
TEPGPE70, TEMAPE84	CASCADED MULTILEVEL PV INVERTER WITH IMPROVED HARMONIC PERFORMANCE DURING POWER IMBALANCE BETWEEN POWER CELLS Objective: The main objective of this project is to mitigate voltage and current distortions by injecting power with lower voltage from the shaded cells without altering the PV voltage.
TEMAED30, TEPGED31	DIRECT INSTANTANEOUS TORQUE CONTROL OF THE SWITCHED RELUCTANCE MOTOR FOR ELECTRIC VEHICLES APPLICATIONS USING FUZZY LOGIC CONTROL Objective: The main objective of this project is to improve the motor performance and reduce the torque ripples compared to other

	techniques such as direct instantaneous torque control.
TEMAED83, TEPGED86	DYNAMIC IDENTIFICATION OF ROTOR MAGNETIC FLUX TORQUE AND ROTOR RESISTANCE OF INDUCTION MOTOR Objective: The main objective of this project is to improve the efficiency of induction motor during parameter variations and to identify and control the rotor parameters.
TEPGED64, TEMAED62, TEPGED85	SOLAR POWERED BRUSHLESS DC MOTOR FOR WATER PUMPING SYSTEM Objective: The main objective of this project is to gain the maximum benefits from solar source along with also gives soft starting of BLDC motor.

## EEE ELECTRICAL IEEE TITLES – ELECTRIC VEHICLES

TEMAED156, TEPGED150	A NEW MULTI-OUTPUT DC-DC CONVERTER FOR ELECTRIC VEHICLE APPLICATION Objective: The main objective of this project is to reduce the cross regulation problems by using A New Multi-Output DC-DC Converter for Electric Vehicle Application
TEMAED157, TEPGED151	SOFT SWITCHING MULTIPHASE INTERLEAVED BOOST CONVERTER WITH HIGH VOLTAGE GAIN FOR EV APPLICATIONS Objective: The main objective of this project is to reduce the switching losses and improve the efficiency of the system by using Soft Switching Multiphase Interleaved Boost Converter with High Voltage Gain for EV.
TEPGED90, TEMAED87	BIDIRECTIONAL POWER FLOW CONTROL INTEGRATED WITH PULSE AND SINUSOIDAL-RIPPLE-CURRENT CHARGING STRATEGIES FOR THREE-PHASE GRID-TIED CONVERTERS. Objective: The objective of this paper is to propose bidirectional charging/discharging strategies for three-phase grid-tied converters.
TEPGED111, TEMAED114, TEMAPE186, TEPGPE160	VOLTAGE ORIENTED CONTROLLER BASED VIENNA RECTIFIER FOR ELECTRIC VEHICLE CHARGING STATIONS Objective: The objective of this paper is to ensure the good steady state performance and fast transient response of the Electric Vehicle Charging Stations by using Vienna Rectifiers.
TEMAED132, TEMAPS549, TEPGED128, TEPGPS515	CONSTANT CURRENT FUZZY LOGIC CONTROLLER FOR GRID CONNECTED ELECTRIC VEHICLE CHARGING Objective: The objective of this paper is to reduce the charging time of the Electric vehicle without any obstacles.
TEPGPE161 TEMAPE187 TEMAED113 TEPGED110	A MULTIFUNCTIONAL NON-ISOLATED DUAL INPUT DUAL OUTPUT CONVERTER FOR ELECTRIC VEHICLE APPLICATION Objective: The main objective of this project is to increase the efficiency by reducing switching losses and number of components.

TEMAED121, TEPGED117	<p>ROBUST CONTROL OF WINDING-BASED DC-BUS CAPACITOR DISCHARGE FOR PMSM DRIVES IN ELECTRIC VEHICLES</p> <p>Objective: The objective of this paper is to discharging the dc-bus capacitor voltage to safe voltage in the electric vehicles (evs) based PMSM drive system when evs encounter an emergency such as a crash even.</p>
TEMAPS554, TEMAED134, TEPGPS520, TEPGED130	<p>ENERGY MANAGEMENT AND OPTIMIZATION OF VEHICLE-TO-GRID SYSTEMS FOR WIND POWER INTEGRATION</p> <p>Objective: The objective of this paper is energy management between Electric Vehicle to grid system for wind power integration</p>
TEMAED137, TEMAPS557	<p>WIRELESS ELECTRIC VEHICLE BATTERY CHARGING SYSTEM USING PV ARRAY</p> <p>Objective: The objective of this paper is helps in identifying the operating frequency at which the resonance with unity voltage gain is achieved irrespective of load variations in Series-Series wireless power transmission systems.</p>
TEMAED141, TEMAPE198, TEPGED135, TEPGPE171	<p>ANALYSIS OF BIDIRECTIONAL DC-DC CONVERTER WITH WIDE VOLTAGE GAIN FOR CHARGING OF ELECTRIC VEHICLE</p> <p>Objective: The main objective of this project is to provide high output voltage for bidirectional dc-dc converter for charging of an Electric Vehicle.</p>
TEMAED146, TEPGED140	<p>OFF-BOARD ELECTRIC VEHICLE BATTERY CHARGER USING PV ARRAY</p> <p>Objective: The main objective of this project is to provide continuous power supply to charge the off board electric vehicle using PV array.</p>
TEPGED91, TEMAED88	<p>SOLAR POWERED UNMANNED AERIAL VEHICLE WITH ACTIVE OUTPUT FILTER UNDER NON-LINEAR LOAD CONDITIONS.</p> <p>Objective: The objective of this paper is to propose Active Output Filter system AOF reduces the size and weight of the power transmission system while significantly improving its conversion efficiency.</p>
TEMAED111, TEPGED92	<p>ADAPTIVE CURRENT CONTROL FOR A BI-DIRECTIONAL INTERLEAVED EV CHARGER WITH DISTURBANCE REJECTION.</p> <p>Objective: The main objective of this project is to maintain the stability, as well as the convergence of the controller</p>
TEMAED90,TEPGED93	<p>REACTIVE POWER COMPENSATION USING VEHICLE-TO GRID ENABLED BIDIRECTIONAL OFF-BOARD EV BATTERY CHARGER</p> <p>Objective: The main objective of this project is designed to provide reactive power compensation to the grid. However, to achieve uninterrupted reactive power compensation, the DC link voltage is regulated by EV batteries that affect its life. Moreover, it goes under more charging and discharging cycles that reduce battery life.</p>
TEMAPE202, TEMAED149, TEPGPE175,TEPGED143	<p>A New Structure of Bidirectional DC-DC Converter for Electric Vehicle Applications</p> <p>Objective: The main objective of this project is to develop a new structure</p>

	of bidirectional DC-DC Converter for Electric Vehicle applications.
TEPGED142	AN ON-BOARD CHARGER INTEGRATED POWER CONVERTER FOR EV SWITCHED RELUCTANCE MOTOR DRIVES Objective: The main objective of this project is to improve the overall performance of the SRM drive of the Electric Vehicle
TEMAPE146, TEPGPE122	ANALYSIS, MODELING AND IMPLEMENTATION OF A SWITCHING BI-DIRECTIONAL BUCK-BOOST CONVERTER BASED ON ELECTRIC VEHICLE HYBRID ENERGY STORAGE FOR V2G SYSTEM Objective: The main objective of this project is to improve the stability of the hybrid battery energy storage system.
TEMAED143, TEPGED137	ELECTRICAL DESIGN OF A PHOTOVOLTAIC-GRID SYSTEM FOR ELECTRIC VEHICLES CHARGING STATION Objective: The main objective of this project is to provide continuous power supply to the charging stations without any power interruptions in the system.
TEMAPS427, TEPGPS400	AN IMPLEMENTATION OF SOLAR PV ARRAY BASED MULTIFUNCTIONAL EV CHARGER Objective: The main objective of this paper is to achieve Unity Power Factor (UPF) operation and Total Harmonic Distortion (THD) of the grid current within 5 percent.
TEMAPS432	DEVELOPMENT OF A HYBRID ENERGY STORAGE SYSTEM(HESS) FOR ELECTRIC AND HYBRID ELECTRIC VEHICLE Objective: The main objective of this paper is to examine the feasibility and capability of a Hybrid Energy Storage System (HESS), composed of battery and ultra-capacitor units, through simulation.
TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY, GRID, BATTERY AND DIESEL GENERATOR SET BASED EV CHARGING STATION. Objective: The main objective of this paper is to provide continuous charging and uninterruptable supply to house loads. It will also regulate generator voltage and frequency, harmonic current compensation of non-linear loads and intentional reactive power compensation.
TEMAED131, TEPGED127, TEMAPS548, TEPGPS514	VEHICLE-TO-GRID ANCILLARY SERVICES USING SOLAR POWERED ELECTRIC VEHICLE CHARGING STATIONS Objective: The main objective of this paper is to enhance the better dynamic response of motor with less harmonic distortions and torque fluctuations.
TEPGED84	DEVELOPMENT OF AN ELECTRIC VEHICLE SYNCHRONOUS RELUCTANCE MOTOR DRIVE Objective: The main objective of this paper is the bilateral DC/DC converter is used as an interface between the battery and the motor drive.
TEPGPS187, TEMAPS226	MULTIMODE OPERATION OF SOLAR PV ARRAY, GRID, BATTERY AND DIESEL GENERATOR SET BASED EV CHARGING STATION

	Objective: The main objective of this paper is to provide continuous charging and uninterruptable supply to house loads. It will also regulate generator voltage and frequency, harmonic current compensation of non-linear loads and intentional reactive power compensation.
TEMAED133, TEPGED129	HIGH EFFICIENCY BRIDGELESS SINGLE-POWER-CONVERSION BATTERY CHARGER FOR LIGHT ELECTRIC VEHICLES Objective: The main objective of this paper is to reduce the conduction losses associated with the input diode rectifier and reduces the reverse-recovery losses of the output diodes by providing zero-current switching.
TEPGPS408	A MULTIFUNCTIONAL SOLAR PV AND GRID BASED ON BOARD CONVERTER FOR ELECTRIC VEHICLES Objective: The main objective of this paper is to charge of plug-in electric vehicles using dual power sources (grid and solar PV).
TEMAED93, TEPGED95	A NOVEL SINGLE PHASE BIDIRECTIONAL ELECTRIC DRIVE RECONSTRUCTED ONBOARD FOR ELECTRIC VEHICLES Objective: The main objective of this paper is to reconstructed converter is simple without specially designed motor.
TEMAED130, TEPGED126	AN APPROACH TOWARDS EXTREME FAST CHARGING STATION POWER DELIVERY FOR ELECTRIC VEHICLES WITH PARTIAL POWER PROCESSING Objective: The main objective of this paper is to eliminate redundant power conversion by making use of partial power rated dc-dc converters to charge the individual evs.
TEMAPE160	AN EFFECTIVE INDUCTIVE POWER TRANSFER TOPOLOGY FOR ELECTRIC VEHICLE BATTERY CHARGING Objective: The main objective of this paper is to improve the zero-voltage zero-current switching (ZVZCS) IPT topology and its switching pattern.
TEPGPS178, TEMAPS217	DESIGN AND DEVELOPMENT OF MODIFIED BL LUO CONVERTER FOR PQ IMPROVEMENT IN EV CHARGER Objective: The main objective of this paper is to improve the power quality by eliminating the input bridge and reducing the THD.

## ACADEMIC PROJECTS:

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