





## **ACADEMIC LIVE PROJECTS 2024-25**



## ELECTRICAL

- Power Systems
- Power Electronics
   Electrical Drives
   Control Systems
- V Hardware & more

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startupindia







TITLE ID	TITLE	DOMAIN	EXTENSION TOPIC
TEMAPE364, TEPGPE331, TEMAPS912, TEPGPS902, TEMAPS913, TEPGPS903	An Improved Multicarrier PWM Technique for Harmonic Reduction in Cascaded H- Bridge Based Solar Photovoltaic System	Solar Power Generation	ISOA
	<b>Objective</b> : The main objective of this project is to develop an improved multicarrier pulse-width modulation (PWM) technique for harmonic reduction in a cascaded H-bridge-based solar photovoltaic (PV) system. The proposed technique aims to minimize total harmonic distortion (THD) in the output voltage, enhancing power quality and system efficiency		
TEMAPS802, TEMAED217, TEPGPS801, TEPGED211	EfficientBidirectionalWirelessPowerTransferSystemControlUsingDualPhaseShiftPWMTechniqueforElectricVehicleApplicationsObjective:The main objective ofthis project is to optimize chargingefficiency and enable power fromG2VandV2Gbyusingbidirectionalwirelesspowertransfersystem.Itfocusesdynamicefficiencyadjustments	Solar Power Generation	PSO Based SMC

## **2024 - 2025 EEE POWER SYSTEMS IEEE TITLES**



	and seamless integration with EV		
	and smart grid infrastructures.		
TEMAPS909,	<b>A Novel Nonisolated Four-Port</b>	Solar Power	New Sliding
TEMAPS910,	Converter for	Generation	Mode Reaching
TEPGPS899,			Law
TEPGPS900,	Flexible DC Microgrid		
TEMAPE362,	Operation		
TEPGPE329			
	<b>Objective</b> : The main objective of		
	this project is to propose a novel		
	non-isolated four-port converter		
	for flexible DC microgrid		
	operation.		
TEMAPS908,	Fully Decoupled Active and	Solar Power	Dual Phase
TEPGPS898,	Reactive Power	Generation	Shift based
TEMAPE360,	Distribution Control for Single		PWM
TEPGPE327	Phase Cascaded Connected		
	Microinverter Under Island		
	Mode		
	<b>Objective</b> : The main objective of		
	this project is to develop a fully		
	decoupled control strategy for		
	active and reactive power		
	distribution in a single-phase		
	cascaded microinverter operating		
	in island mode.		
TEMAPS904,	Evaluating the Performance of	Solar Power	Ant Colony
TEPGPS894,	MPPT and FPPT Approach in	Generation	
TEMAPE358,	Standalone Solar PV Systems		
TEPGPE325			
	Under Variable Conditions		
	<b>Objective</b> : The main objective of		
	this project is to analyze and		
	and project is to unurgee and		



compare the performance of Maximum Power Point Tracking (MPPT) and Fixed Power Point Tracking (FPPT) algorithms in standalone solar photovoltaic (PV) systems under varying environmental conditions, such as changes in solar irradiance and temperature.Solar Power GenerationTEMAPS902, TEPGPS893An Adaptive Control Strategy of Islanded Hybrid Microgrid Considering the Cooperative Operation of PV-Energy Storage-Diesel GeneratorSolar Power GenerationFPPTObjective: The main objective of this project is to operate the islanded microgrid by implementing an adaptive control strategy with the cooperative operation of PV-Energy Storage- Diesel Generator.Solar Power GenerationAnt Colony based MPPTTEMAPS901, TEPGCS124PV Systems Operating in Dynamic Climatic Circumstances Using a PSO- based SMC and PID ControllerSolar Power GenerationAnt Colony based MPPT	l			
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TEMACS878,         TEPGCS124         Circumstances Using a PSO-         based SMC and PID Controller         Objective: The main objective of         this project is to develop a robust	TEMAPS901,	PV Systems Operating in	Solar Power	Ant Colony
TEPGCS124       Circumstances       Using       a       PSO-         based       SMC and PID Controller         Objective:       The main objective of         this project is to develop a robust		Dynamic Climatic	Generation	based MPPT
based SMC and PID Controller         Objective: The main objective of         this project is to develop a robust		Circumstances Using a PSO-		
this project is to develop a robust		based SMC and PID Controller		
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		Objective: The main objective of		
control scheme for photovoltaic		this project is to develop a robust		
control seneme for photovolule		control scheme for photovoltaic		



	<ul> <li>(PV) systems operating under dynamic climatic conditions using a hybrid approach combining Particle Swarm Optimization</li> <li>(PSO)-based Sliding Mode Control (SMC) control.</li> </ul>		
TEMAPS900, TEPGPS890, TEMAPE356, TEPGPE323	Evaluation and Control of aSolar PowerSystem Connected with anElectrical GridObjective: The main objective ofthe project is to evaluate andcontrol a solar power systemconnected to an electrical gridusing the IncrementalConductance (INC) MPPTtechnique to optimize energytransfer and improve systemperformance.	Solar Power Generation	PSO MPPT
TEMAPS898, TEMAPS899, TEPGPS888, TEPGPS889	Controlandperformanceassessment of a PV and batteryoperatedshuntactivepowerfilterObjective:The main objective ofthisprojectistodesignanefficientcontrolstrategyforashuntactivepoweredbysolarPVandbattery	Solar Power Generation	Dual Fuzzy Sugeno method



systems. This involves mitigating harmonic distortion, improving power quality, and providing	
power quality, and providing	
reactive power compensation.	
TEMAPS897, Analysis of Power Coordination Solar Powe	er Optimized PI
TEMAPE355, Control Strategy in Island Mode Generation	n
TEPGPS887, of Photovoltaic Energy Storage	
TEPGPE322 Combined System	
<b>Objective:</b> The main objective of	
this project is to design and	
analysis of power co-ordination	
control Strategy in Islanded Mode	
of photovoltaic & energy storage	
combined system.	
	CA Deced
TEMAPS895, <b>Implementation of Fuzzy and</b> Solar Power TEPGPS885, <b>Neural Networks-Based MPPT</b> Generation	
TEMACS877.	
TEPGCS123 Techniques on Solar PV System	
Objective: The main objective of	
<b>Objective</b> : The main objective of this project is to implement Fuzzy	
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this project is to implement Fuzzy and Neural Networks based MPPT	
this project is to implement Fuzzy and Neural Networks based MPPT techniques for Solar PV System	er STSMC
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this project is to implement Fuzzy and Neural Networks based MPPT techniques for Solar PV System performance enhancement.TEMAPS891, 	
this project is to implement Fuzzy         and Neural Networks based MPPT         techniques for Solar PV System         performance enhancement.         TEMAPS891,         TEPGPS881,    Novel Hybrid Fuzzy/Rule- Generation	



TEMAPS888, TEMAPS889,	this project is to develop an effective energy management strategy (EMS) for a hybrid energy storage system (HESS) composed of batteries and supercapacitors. This EMS aims to optimize power allocation between the battery and supercapacitor, enhance the dynamic response of the system, stabilize the DC bus voltage, and extend the lifespan of the battery. <b>A Novel Fuzzy/SMC based</b> <b>Energy Management Strategy</b>	Solar Power Generation	Genetic Algorithm
TEMAPS889, TEMACS873, TEPGPS878, TEPGPS879, TEPGCS119	Energy Management Strategy for Hybrid Energy Storage System in an Isolated DC Microgrid Objective: The main objective of this project is to implement an	Generation	Algorithm
	energy management strategy for hybrid energy storage system in an isolated DC microgrid using a Novel Fuzzy and SMC based controlling topology.		
TEMAPS885, TEMAPS886, TEPGPS875, TEPGPS876, TEMACS871, TEPGCS117	A Novel Cooperative Control for SMES-Battery Hybrid Energy Storage in PV Grid- Connected System Objective: The main objective of this project is to propose a novel	Solar Power Generation	STSMC



	cooperative control for		
	SMES/Battery Hybrid Energy		
	Storage in PV-Grid Connected		
	System to meet escalating power		
	demand.		
TEMAPS881,	Hybrid Compensation Based	Solar Power	FPPT
TEMAPE342,	Efficient Wireless Charging	Generation	
TEMAED243,	System Design with Solar		
TEPGPS871,	Photovoltaic Interface		
TEPGPE309,	Toward		
TEPGED237,	Sustainable Transportation		
	<b>Objective:</b> The main objective of		
	this project, is to design an		
	efficient wireless charging system		
	integrated with a solar		
	photovoltaic interface to support		
	sustainable transportation. The		
	focus is on improving energy		
	transfer efficiency and ensuring		
	reliable power delivery to electric		
	vehicles (EVs) using renewable		
	energy sources.		
TEMAPS883,	An Adaptive Fuzzy Controller-	Solar Power	ANN based
TEPGPS873,	Based Distributed Voltage	Generation	MPPT
TEMACS866,	Control Strategy for a Remote		
TEPGCS112,	Microgrid System With Solar		
TEMAPE344,	Energy and Battery Support		
TEPGPE311			
	<b>Objective</b> : The main objective of		
	this project is to propose an		
	adaptive fuzzy controller-based		



	distributed voltage control strategy		
	for a remote microgrid system		
	with solar energy and battery		
	support.		
TEMAPS878,	Two-Stage Three-Phase	Solar Power	Adaptive
TEPGPS868,	Transformerless Hybrid	Generation	Fuzzy and P &
TEMAPE341,	Multilevel Inverter for Solar		0
TEPGPE308	PV Application		
	<b>Objective:</b> The main objective of		
	this project, is to develop an		
	efficient, high-performance		
	inverter system that converts the		
	direct current (DC) from solar		
	photovoltaic (PV) panels into		
	alternating current (AC) suitable		
	for grid integration or load supply.		
TEMAPS879,	Generalized DSC-FDC-PLL	Solar Power	ISOA
TEPGPS869,	Based Synchronization of PV	Generation	
TEMACS864, TEPGCS110,	Array-BES Fed Water Pump System With		
TEMAED242,	Utility Grid		
TEPGED236			
	<b>Objective</b> : The Main objective of		
	this project is to develop and		
	implement a generalized delayed		
	signal cancellation (GDSC)-based		
	phase-locked loop (PLL) for		
	synchronizing a photovoltaic (PV)		
	array and battery-supported water		
	pump system with the utility grid,		
	ensuring efficient power		
	management in both grid-		



	connected and islanded modes.		
TEMAPS872,	A Capacitor Voltage Balancing	Solar Power	Dual Fuzzy
TEMAPE337,	Hybrid PWM	Generation	Sugeno
TEPGPS862, TEPGPE304	Technique to Improve the Performance		Controller
I LFGF L504	of T-Type NPC Inverters		
	of i Type Are inverters		
	Objective: The main objective of		
	this project is to improve the		
	performance of T-Type NPC		
	Inverters by using a capacitor		
	voltage balancing hybrid PWM		
	technique.		
TEMAPS871,	GAO Optimized Sliding Mode	Solar Power	CSA Based
TEPGPS861,	Based	Generation	STSMC
TEMAED240, TEPGED234,	Reconfigurable Step Size Pb&O MPPT		
TEMACS860,	Controller With Grid		
TEPGCS106	Integrated		
	EV Charging Station		
	<b>Objective:</b> The main objective of		
	this project is to develop a GAO-		
	optimized sliding mode-based		
	reconfigurable step size Pb&O		
	MPPT controller to maximize the		
	efficiency of PV systems. This		
	system will seamlessly integrate with grid-connected EV charging		
	stations, ensuring optimal energy		
	utilization and reliable 24/7		
	charging.		
TEMAPS868,	Modulated Predictive Current	Solar Power	CSA
TEMAPE334,	Control of	Generation	
TEMACS858,	Photovoltaic Central NPC		



Objective: The main objective of this project is to develop and implement a modulated predictive current control strategy for a photovoltaic central NPC inverter, to enhance performance while minimizing computational demands.Solar Power GenerationTEMAPS867, TEPGP8357, TEMAPE333, TEPGPE300Single-Phase Switched-Capacitor Boost Multilevel Inverter Topology for Renewable Energy ApplicationsSolar Power GenerationClosed Loop PIObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar Power GenerationTEMAPS8848, TEPGPS848, TEMAED238, Grid-Integrated PV With 24/7 Distortion-Free Charging forSolar Power generationSTSMC	TEPGPS858, TEPGPE301, TEPGCS104	Inverter With Reduced Computational Burden		
this project is to develop and implement a modulated predictive current control strategy for a photovoltaic central NPC inverter, to enhance performance while minimizing computational demands.Solar Power GenerationTEMAPS867, TEPGP8357, TEMAPE333, TEPGPE300Single-Phase Switched-Capacitor Boost Multilevel Inverter Topology 		<b>Objective:</b> The main objective of		
implement a modulated predictive current control strategy for a photovoltaic central NPC inverter, to enhance performance while minimizing computational demands.Solar Power GenerationTEMAPS867, TEPGP8857, TEMAPE333, TEPGPE300Single-Phase 15-Level Switched-Capacitor Boost Multilevel Inverter Topology for Renewable Energy ApplicationsSolar Power GenerationClosed Loop PI GenerationObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar Power StrSMC GenerationTEMAPS858, TEPGPS848, TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Gradient Dased GenerationSolar Power StrSMC Generation				
Current control strategy for a photovoltaic central NPC inverter, to enhance performance while minimizing computational demands.Solar PowerTEMAPS867, TEPGP5857, TEMAPE333, TEPGPE300Single-Phase Switched-Capacitor Boost Multilevel Inverter Topology for Renewable Energy ApplicationsSolar Power GenerationClosed Loop PIObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar Power GenerationTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Based Grid-Integrated PV With 24/7Solar Power GenerationSTSMC		implement a modulated predictive		
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toenhanceperformancewhileminimizingcomputationaldemands.Solar PowerTEMAPS867,Single-Phase15-LevelSwitched-CapacitorBoostMultilevel InverterTopologyforRenewableEnergyApplicationsObjective: The main objective ofthis project is to provide a high-efficiency, low-cost inverter thatcan boost and convert DC powerfrom renewable sources into high-quality AC power, while reducingthe number of power electroniccomponents and achieving bettervoltage regulation and harmonicperformance.TEMAPS858,TEPGPS848,TEMAPS38,TEMAPS384,TEMAPS385,Control in aGrid-Integrated PV With 24/7				
minimizingcomputational demands.Closed Loop PITEMAPS867, TEPGPS857, TEMAPE333, TEPGPE300Single-Phase Switched-Capacitor Multilevel Inverter Topology for Renewable ApplicationsSolar Power GenerationClosed Loop PIObjective: Itis project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar Power GenerationTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power GenerationSTSMC		-		
TEMAPS867, TEPGPS857, TEPGPE300Single-Phase Single-Phase Switched-Capacitor Boost Multilevel Inverter Topology for ApplicationsSolar Power GenerationClosed Loop PIObjective: Image: Image:		-		
TEMAPS867, TEPGPS857, TEMAPE333, TEPGPE300Single-Phase Switched-Capacitor Inverter Topology for Renewable Energy ApplicationsSolar Power GenerationClosed Loop PIObjective: Inverter Topology for Renewable Energy ApplicationsSolar Power GenerationClosed Loop PIObjective: Inverter Topology for Renewable Energy ApplicationsObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar Power Solar PowerTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power GenerationSTSMC		e i		
TEPGPS857, TEMAPE333, TEPGPE300Switched-Capacitor Boost Multilevel Inverter Topology for Renewable Energy ApplicationsGenerationObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.GenerationTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Based GenerationSolar Power Generation	TEMAPS867		Solar Power	Closed Loop PI
TEPGPE300for Renewable ApplicationsEnergy ApplicationsObjective:The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power Generation		0		
ApplicationsApplicationsObjective: The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power Generation	ТЕМАРЕЗЗЗ,	Multilevel Inverter Topology		
Objective:The main objective of this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Solar PowerSTSMCTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Based GenerationSolar PowerSTSMC	TEPGPE300			
this project is to provide a high- efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Image: Conjugate-Gradient Based GenerationTEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Based Grid-Integrated PV With 24/7Solar Power Generation		Applications		
efficiency, low-cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.Image: Component of the number of power electronic component of the number of power electronic performance.TEMAPS858, TEPGPS848, TEPGPS848, TEMAED238,Control in a Grid-Integrated PV With 24/7Solar Power Generation		<b>Objective:</b> The main objective of		
can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance		this project is to provide a high-		
from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power Generation		efficiency, low-cost inverter that		
from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Solar Power Generation		can boost and convert DC power		
quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Based Generation				
the number of power electronic components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Grid-Integrated PV With 24/7Based Generation				
components and achieving better voltage regulation and harmonic performance.components and achieving better voltage regulation and harmonic performance.TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Control in aBased GenerationSolar Power GenerationTEMAED238,Grid-Integrated PV With 24/7Generation				
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TEMAPS858, TEPGPS848, TEMAED238,Conjugate-Gradient Control in aBased GenerationSolar Power GenerationSTSMCTEMAED238,Grid-Integrated PV With 24/7GenerationGeneration		voltage regulation and harmonic		
TEPGPS848,Control in aGenerationTEMAED238,Grid-Integrated PV With 24/7		performance.		
TEPGPS848,Control in aGenerationTEMAED238,Grid-Integrated PV With 24/7	TEMAPS858,	Conjugate-Gradient Based	Solar Power	STSMC
	TEPGPS848,		Generation	
TEPGED232 Distortion-Free Charging for		<b>S</b> 1		
	TEPGED232	Distortion-Free Charging for		
Bidirectional EV Charger		Bidirectional EV Charger		



	<b>Objective:</b> The main objective of		
	this project is to optimize the		
	power flow and enhance the		
	efficiency of energy transfer		
	between the grid, PV system, and		
	EV charger. This approach aims to		
	minimize harmonic distortions and		
	ensure seamless charging and		
	discharging of EV batteries,		
	promoting reliable and sustainable		
	energy management.		
TEMAPS864,	Circle Search Algorithm-Based	Solar Power	Genetic
TEMACS856,	Super Twisting Sliding Mode	Generation	Algorithm
TEPGPS854,	<b>Control for MPPT of Different</b>		
TEPGCS102,	<b>Commercial PV Modules</b>		
TEMAPE331,	The main chieve of this and is t		
TEMAPE332,	The main objective of this project		
TEPGPE298, TEPGPE299	is to implement a circle search		
	algorithm based super twisting		
	sliding mode control for MPPT of		
	different commercial PV modules.		
TEMAPS859,	A Fuzzy-Based Adaptive P&O	Solar Power	ISOA
TEMACS855,	MPPT Algorithm for PV	Generation	
TEPGPS849,	Systems with Fast Tracking		
TEPGCS101	and Low Oscillations Under		
	Rapidly Irradiance Change Conditions		
	conuctions		
	<b>Objective:</b> The main objective of		
	this project is to get fast tracking		
	and low oscillations under rapidly		
	irradiance change conditions in		
	PV system by using Fuzzy-Based		
L		L	



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	adaptive P&O MPPT Algorithm.		
TEMAPS860,	Voltage Feed-Forward Control	Solar Power	Ant Colony
TEMAPS861,	of Photovoltaic Battery DC	Generation	Optimization
TEPGPS850,	Microgrid Based on Improved		
TEPGPS851,	Seeker Optimization		
TEMAPE328,	Algorithm		
TEPGPE295	Objective: The main objective of		
	<b>Objective:</b> The main objective of this project is to develop a voltage		
	feed-forward control system for a		
	photovoltaic-battery DC		
	microgrid, utilizing an Improved		
	Seeker Optimization Algorithm		
	(ISOA).		
TEMAPS856,	A Single-Stage Bridgeless PFC	Solar Power	GAO optimized
TEPGPS846,	Charger with	Generation	SMC
TEMAPS857,	Enhanced Power Quality for		
TEPGPS847,	LEV Mounted Solar PV Panel		
TEMAED236, TEPGED230	<b>Objective:</b> The main objective of		
TEI GEDZ50			
	the project is to design a single-		
	stage bridgeless Power Factor		
	Correction (PFC) charger that		
	enhances power quality for solar		
	photovoltaic (PV) panels installed		
	on light electric vehicles (LEVs).		
	This integrated approach		
	optimizes efficiency, minimizes		
	power losses.		
TEMAPS854,	Improved Photovoltaic MPPT	Solar Power	CSA
TEMACS854,	Algorithm Based on Ant	Generation	
TEPGPS845,	Colony Optimization and		
TEPGCS100	Fuzzy Logic Under Conditions		
	of Partial Shading		



	<b>Objective:</b> The main objective of this project is to get the improved performance from PV array by using the AFO based MPPT algorithm under partial shading conditions.		
TEMAPS855, TEPGPS843, TEMAPS853, TEPGPS844	Three-Phase Grid Connected Shunt Active Power Filter Based on Adaptive Q-LMF Control TechniqueObjective: The main objective of this project is to improve power quality in dynamic conditions in Three-Phase grid connected applications by using SAPF based on Q-LMF control Technique.	Solar Power Generation	ISOA
TEPGPS839, TEMAPS848, TEPGPS838, TEMAPS847	Active Power Sharing Schemein a PV Integrated DCMicrogrid With CompositeEnergy Storage DevicesObjective: The main objective ofthis project is to optimize powerdistribution among storagesystems to enhance stability andefficiency. This ensures balancedpower output, improved systemreliability, and voltage stability.	Solar Power Generation	ISOA
TEMAPS827, TEMAED224, TEPGPS818, TEPGED218	Integrated Three-Port Converter for Solar-Charged Electric Vehicle Applications	Solar Power Generation	Fixed Power Point Tracking



	<b>Objective:</b> The main objective of this project is to efficiently manage power flow from solar panels to both a high-voltage battery (HVB) and a low-voltage battery (LVB). Optimizing the use of solar energy even under partial shading conditions.		
TEMAPS833, TEMAPS834, TEPGPS824, TEPGPS825, TEMACS102, TEPGCS96	ExperimentalInvestigationsonPhotovoltaicInterfaceNeutralPointClampedMultilevelInverter-BasedShuntActivePower Filter toEnhanceGridPower QualityObjective:The main objective ofthisproject is to enhance thepowerqualitybyusingPVinterfacedNPC-MLIbasedshuntactivepowerpowerfilterapplications.	Solar Power Generation	PSO
TEMAPS813, TEMAPS814, TEPGPS818, TEMAPS808, TEMAPS809, TEMAPS810, TEPGPS808, TEPGPS809, TEPGPS810, TEPGPS810, TEPGED212	Modelling and Coordinated Control of Grid Connected Photovoltaic, Wind Turbine Driven PMSG, and Energy Storage Device for a Hybrid DC/AC Microgrid Objective: The main objective of this project is to optimize the performance and integration of grid-connected photovoltaic systems, wind-turbine driven PMSGs and energy storage devices within a hybrid dc-ac microgrid through advanced modelling and coordinated	Solar Power Generation	STSMC



	control strategies.		
TEMAPS846, TEPGPS837, TEMAPE325, TEPGPE292, TEMAED234, TEPGED228	A New Multilevel Inverter with Reduced Component Count for a Standalone Solar Energy Conversion System Objective: The main objective of this project is to propose a new multilevel inverter with reduced component count for a standalone solar energy conversion system- based application.	Solar Power Generation	Dual Phase Shift based PWM
TEMAPS838, TEMAPS839, TEPGPS829, TEPGPS830, TEMAPE322, TEPGPE289	Grid-Forming Voltage-Source Inverter for Hybrid Wind-Solar Systems Interfacing Weak Grids Objective: The main objective of this project is to propose a grid forming voltage source inverter for hybrid wind-solar systems interfacing weak grids.	Solar Power Generation	Dual Fuzzy Sugeno Controller
TEMAPS823, TEMAPS824, TEPGPS814, TEPGPS815, TEMACS100, TEPGCS94	Advance Controller for PowerQuality andPerformance Improvement ofGrid-Connected Single-PhaseRooftop PVSObjective: The main objective ofthis project is to enhance powerquality and to improveperformance of grid-connectedsingle phase roof top photo-	Solar Power Generation	New Sliding Mode Reaching Law



	voltaic systems by optimizing power output and ensuring stable, efficient integration with the grid.		
TEMAPS828, TEMAPS829, TEPGPS819, TEPGPS820	Dual Fuzzy-Sugeno Method to Enhance Power Quality Performance using a Single- phase Dual UPQC-Dual PV Without DC-Link Capacitor	Solar Power Generation	ISOA
	<b>Objective:</b> The main objective of this project is enhancing power quality performance superior voltage regulation and load balancing without the use of a DC-Link capacitor in Single- Phase Dual-UPQC and Dual PV.		
TEMAPS826, TEPGPS817, TEMAPE317, TEPGPE284, TEMAED222, TEPGED216	Cascaded Interleaved DC-DC Converter for a Bidirectional Electric Vehicle Charging Station Objective: The main objective of this project is to propose a cascaded interleaved DC-DC converter for a bidirectional Electric Vehicle charging station to reduce current and voltage stress on the semi-conductors and passive elements.	Generation	STSMC
TEMAPS825, TEPGPS816, TEMAPE314, TEMAPE315, TEPGPE281, TEPGPE282,	MultifunctionalOnboardCharger for Electric VehiclesIntegrating a Low-Voltage DC-DC Converter and Solar Roof	Solar Power Generation	GAO optimized SMC



TEMAED220,	<b>Objective:</b> The main objective of		
TEPGED214			
	multifunctional on-board charger		
	for electric vehicles integrating a		
	low-voltage DC-DC converter and		
	solar roof.		
TEMAPS807,	Designing of a PSO-Based	Solar Power	Genetic
TEPGPS807,	Adaptive SMC With a	Generation	Algorithm
TEMAPE304,	Multilevel Inverter for MPPT		
TEPGPE276,	of PV		
TEMACS98,	Systems Under Rapidly		
TEPGCS92	Changing Weather Conditions		
	<b>Objective:</b> The main objective of		
	this project is to design a PSO-		
	based Adaptive SMC with a Multilevel Inverter for MPPT of		
	PV Systems Under Rapidly		
	Changing Weather Conditions to		
	enhance the overall efficiency		
	and stability of the PV system.		
TEMAPS798,	Mitigating Uncertainty	Solar Power	STSMC
TEMAPS799,	Problems of Renewable	Generation	
TEMAPS800,	Energy Resources Through		
TEPGPS797,	Efficient Integration of Hybrid		
TEPGPS798,	Solar PV/Wind Systems Into		
TEPGPS799,	Power Networks		
TEMAPE300,			
TEMAPE301,			
TEPGPE272,	<b>Objective:</b> The main objective of		
TEPGPE273	this project is to mitigate the		
	problems of renewable energy		
	resources through efficient		
	integration of Hybrid Solar		
	PV/Wind systems into power		
	networks.		



TEMAPS801,	Design of an Extendable High	Solar Power	ISOA
TEPGPS800,	Boost Multi-Port Z-Network	Generation	
TEMAPE302,	Converter for Small Power		
TEPGPE274	Grid-Connected PV		
	Applications		
	Objective: The main objective of		
	this project is to propose an		
	extendable high boost Multi-port		
	Z-Network converter for		
	implementing in Grid Connected		
	PV Applications.		
TEMAPS795,	Enhancement of Solar PV	Solar Power	Fixed Power
TEPGPS794,	Efficiency Using Double Integral	Generation	Point Tracking
TEMAPE296, TEPGCS89,	Sliding Mode MPPT Control		
TEMAPE221,			
TEPGPE193,	<b>Objective:</b> The main objective of		
TEPGPE194	this project is to enhance the		
	efficiency of Solar Photovoltaic		
	(PV) Panels through the		
	implementation of a Double		
	Integral Sliding Mode Maximum		
	Power Point Tracking (MPPT)		
	Control Strategy.		
TEMAPS796,	Design and Analysis of Novel	Solar Power	ISOA
TEMAPE298, TEPGPS795,	High-Gain Boost Converter for Bonowable Enorgy Systems	Generation	
TEPGPE270	Renewable Energy Systems (RES)		
	Objective: The main objective of		
	this project is to create and		



			1
	evaluate a high-gain boost		
	converter customized for RES		
	prioritizing efficiency and		
	performance optimization for		
	sustainable energy applications.		
TEMAPS884,	A Novel Coordinated Control	Wind	Model
TEMACS867,	Strategy for Frequency	Power	Predictive
TEPGPS874,	Regulation of MMC-HVDC	Generation	Controller
TEPGCS113	Connecting Offshore Wind		
	Farm		
	<b>Objective:</b> The main objective of		
	this project is to regulate the		
	frequency by using a novel		
	coordinated control strategy for		
	MMC-HVDC systems connecting		
	offshore wind farms (OWFs)	XA7: 1	CTTCIAC
TEMAPS882,	Enhancing Zero Voltage Ride	Wind	STSMC
TEPGPS872,	Through of	Power	
TEMAED244,	PMSG-Based Wind Generator	Generation	
TEPGED238,	With		
ТЕМАРЕЗ43,	Interchange of Converter		
TEPGPE310	Control		
	and Optimized Supercapacitor		
	Energy Storage System		
	<b>Objective:</b> The main objective of		
	this project is to improve the		
	reliability and stability of wind		
	energy systems during grid		
	disturbances. This is achieved by		
	optimizing the control strategy of		
	the converter and incorporating a		
	super-capacitor-based energy		
	storage system.		
TEMAPS880,	Dual-Sequence	Wind	STSMC
TEPGPS870,	Synchronization Stability	Power	510110
TEMACS865,	Analysis and Control of Multi-	Generation	
1 LIMAC5005,	marysis and control of multi-	ucheration	



TEPGCS111	Paralleled Wind Farms During Asymmetrical Grid FaultsObjective: The main objective of this project is to implement stability assessment method and a current control strategy to achieve the margin of dual-sequence synchronization under asymmetrical grid faults.		
TEMAPS877, TEPGPS867, TEMACS862, TEPGCS108	VirtualSynchronousGenerator ControlStrategyofGrid-FormingMatrixConverterforRenewablePower GenerationObjective:The main objective ofthis project is to enhance gridstability and mimic the inertia ofconventionalsynchronousgenerators.This approach ensuressmooth integration of renewableenergy sources into the power gridbyregulatingvoltageandfrequency,therebysystem reliabilityand providingsupport during grid disturbances.	Wind Power Generation	STSMC
TEMAPS875, TEMAPE339, TEPGPS865, TEPGPE306	An Ingenious Technique to Track the Maximum Power Point for a Wind Energy System	Wind Power Generation	ANN based SMC



	<b>Objective:</b> The main objective ofthis project is to develop anadvanced Maximum Power PointTracking (MPPT) technique forWind Energy Conversion Systems(WECS). The goal is to maximizethe extraction of power from windenergy systems by improving theefficiencyandreducing		
TEMAPS876, TEPGPS866, TEMAED241, TEPGED235	oscillations around the MPP. Passive Control for Brushless Doubly-Fed Reluctance Generator Under Unbalanced Grid Voltages	Wind Power Generation	Closed Loop VSC
	<b>Objective:</b> The main objective of this project is to develop a passive control strategy for Brushless Doubly-Fed Reluctance Generators (BDFRGs) that effectively mitigates the adverse effects of unbalanced grid voltages.		
TEMAPS836, TEPGPS827, TEMAED228, TEPGED222	ExperimentalValidation ofFeedback PIControllersforMulti-RotorWind EnergyConversion SystemsObjective:The main objective ofthis project is to access theperformance and stability analysisof the controllers in real-world	Wind Power Generation	STSMC



	conditions and evaluating their		
	ability to maintain optimal rotor		
	speeds and maximize energy		
	conversion efficiency under		
	varying wind conditions.		
TEPGPE288,	A Maximum Power Point	Wind	Hybrid
TEMAPE321,	Tracking Technique for a	Power	Systems
TEPGPS826,	Wind Power System Based on	Generation	
TEMAPS835	the Trapezoidal Rule		
	_		
	<b>Objective:</b> The main objective of		
	this project is to propose a		
	maximum power point tracking		
	(MPPT) technique for a wind		
	power system based on the		
	Trapezoidal Rule is to enhance		
	the efficiency and output of the		
	wind turbine system		
	-	Wind	Dual Europ
TEMAPS838,	Grid-Forming Voltage-Source	Wind	Dual Fuzzy
TEMAPS839,	Inverter for	Power	Sugeno
TEPGPS829,	Hybrid Wind-Solar Systems	Generation	Controller
TEPGPS830,	Interfacing		
TEMAPE322,	Weak Grids		
TEPGPE289			
	<b>Objective</b> : The main objective of		
	this project is to propose a grid		
	forming voltage source inverter		
	for hybrid wind-solar systems		
	interfacing weak grids.		
TEMAPS844,	Coordinated Control of Grid-	Wind	Ingenious
TEMAPS845,	<b>Connected PMSG Based Wind</b>	Power	MPPT
TEPGPS835,	Energy System With STATCOM	Generation	
TEPGPS836,	and Supercapacitor Energy		
TEMAED233,	Storage		
TEPGED227			
	Objective: The main objective of		
	this project is to propose a		
	coordinated control of grid		



	connected PMSG based wind energy system with STATCOM and supercapacitor energy storage systems.		
TEMAPS813, TEMAPS814, TEPGPS818, TEMAPS808, TEMAPS809, TEMAPS810, TEPGPS808, TEPGPS809, TEPGPS810, TEPGPS810, TEPGED212	Modelling and Coordinated Control of Grid Connected Photovoltaic, Wind Turbine Driven PMSG, and Energy Storage Device for a Hybrid DC/AC Microgrid Objective: The main objective of this project is to optimize the performance and integration of grid-connected photovoltaic systems, wind-turbine driven PMSGs and energy storage devices within a hybrid dc-ac microgrid through advanced modelling and coordinated control strategies.	Wind Power Generation	STSMC
TEMAPS830, TEPGPS821, TEMAED225, TEPGED219	StabilityAnalysisandEnhancedVirtualSynchronousControlforBrushlessDoubly-fedInductionGeneratorBasedWind TurbinesWind TurbinesObjective:The main objective ofthisprojectistoanalyzethestabilityandproposethevirtualsynchronousSynchronouscontrolforBrushlessDoubly-fedInductionBasedWind Turbines.	Wind Power Generation	Predictive Control



TEMAPS798,	Mitigating Uncertainty	Wind	STSMC
TEMAPS799,	Problems of Renewable	Power	
TEMAPS800,	Energy Resources Through	Generation	
TEPGPS797,	Efficient Integration of Hybrid		
TEPGPS798,	Solar PV/Wind Systems Into		
TEPGPS799,	Power Networks		
TEMAPE300,			
TEMAPE301,			
TEPGPE272,	<b>Objective:</b> The main objective of		
TEPGPE273	this project is to mitigate the		
	problems of renewable energy		
	resources through efficient		
	integration of Hybrid Solar		
	PV/Wind systems into power		
	networks.		
TEMAPS914,	Protection and Power	Power	NSMC
TEPGPS904,	Smoothing of a DFIG/DC	Quality	
TEMAPS915,	Microgrid Hybrid Power		
TEPGPS905	System With SMES-Based		
	Unified Power Quality		
	Conditioner		
	<b>Objective:</b> The primary		
	objective of this paper is to		
	develop a superconducting		
	magnetic energy storage		
	(SMES)-based unified power		
	quality conditioner (UPQC) to		
	enhance power quality, ensure		
	protection, and smooth power		
	fluctuations in a hybrid DFIG/DC		
	micro grid system. The		
	proposed system addresses low-		
	voltage ride-through (LVRT)		
	issues and power instability caused by renewable energy		
	caused by reliewable ellergy		



	variability and grid faults.		
TEMAPE364, TEPGPE331, TEMAPS912, TEPGPS902, TEMAPS913, TEPGPS903	An Improved Multicarrier PWM Technique for Harmonic Reduction in Cascaded H- Bridge Based Solar Photovoltaic System	Power Quality	ISOA
	<b>Objective</b> : The main objective of this project is to develop an improved multicarrier pulse-width modulation (PWM) technique for harmonic reduction in a cascaded H-bridge-based solar photovoltaic (PV) system. The proposed technique aims to minimize total harmonic distortion (THD) in the output voltage, enhancing power quality and system efficiency		
TEMAPS898, TEMAPS899, TEPGPS888, TEPGPS889	Control and performance assessment of a PV and battery operated shunt active power filter	Power Quality	Dual Fuzzy Sugeno method
	<b>Objective</b> : The main objective of this project is to design an efficient control strategy for a shunt active power filter (SAPF) powered by solar PV and battery systems. This involves mitigating harmonic distortion, improving power quality, and providing reactive power compensation.		
TEMAPS893, TEMACS875, TEMAPE351,	A Fast-response Power-Flow Control Strategy	Power Quality	STSMC



TEPGPS883,	of MMC-UPFC based on Active		
TEPGCS121,	Disturbance		
TEPGPE318	<b>Rejection Control</b>		
	Objective: The primary objective		
	of this paper is to develop a rapid		
	power flow control strategy for the		
	Modular Multilevel Converter-		
	Unified Power Flow Controller		
	(MMC-UPFC) using Active		
	Disturbance Rejection Control		
	(ADRC).		
TEMAPS873,	<b>Optimized PI Gain in UPQC</b>	Power	Dual Fuzzy
TEPGPS863, TEMACS861,	<b>Control Based on Improved</b>	Quality	Sugeno Controller
TEPGCS107	Zero Attracting Normalized		Controller
	LMS		
	<b>Objective:</b> The main objective of		
	this project is developing an		
	enhanced control scheme for a		
	4-wire unified power quality		
	conditioner (UPQC) using the		
	improved reweighted zero		
	Attracting normalized LMS		
	(IRZA-NLMS) and self-adaptive		
	multi population Rao (SAMP-		
	Rao) optimization to effectively		
	mitigate power quality issues.		
TEMAPS862,	Improving Active Resonance	Power	Optimized PI
TEPGPS852,	Damping and	Quality	



TEMAPE330,	Unbalanced Voltage Mitigation		
TEPGPE297,	Based on		
TEMAPS863,	Combined DDSRF and Washout		
TEPGPS853			
	Filter		
	in Islanded Microgrids		
	<b>Objective:</b> The main objective of this		
	project is to develop and implement a		
	combined approach using Double		
	Decoupled Synchronous Reference		
	Frame (DDSRF) and Washout Filter		
	techniques to enhance active		
	resonance damping and mitigate		
	unbalanced voltage conditions in		
	islanded microgrids. This combined		
	approach aims to improve the		
	stability, reliability, and power		
	quality of islanded microgrids,		
	ensuring efficient and continuous		
	operation under varying load and		
	generation conditions.		
TEMAPS856,	A Single-Stage Bridgeless PFC	Power	GAO optimized
TEPGPS846,	Charger with	Quality	SMC
TEMAPS857,	Enhanced Power Quality for		
TEPGPS847,	LEV Mounted Solar PV Panel		
TEMAED236,	Objections The main abjection of		
TEPGED230	<b>Objective:</b> The main objective of the project is to design a single-		
	stage bridgeless Power Factor		
	Correction (PFC) charger that		
	enhances power quality for solar		
	photovoltaic (PV) panels installed		
	on light electric vehicles (LEVs).		
	This integrated approach		
	optimizes efficiency, minimizes		



	power losses.		
TEMACS853, TEMAPS851, TEPGPS842, TEPGCS99	An Advanced Control Strategy for a Weak Grid-Connected DG for Enhancing Voltage Support During Co-occurrence of Sag and Swell	Power Quality	ISOA
	<b>Objective:</b> The main objective of this project is advanced control strategy for a weak grid-connected DG system is to ensure stable operation, enhance voltage support, and improve overall power quality during sag and swell events. By achieving these, strategy contributes to reliable and efficient integration of DG into the grid, supporting sustainable energy practices and enhancing grid resilience.		
TEMAPS855, TEPGPS843, TEMAPS853, TEPGPS844	Three-Phase Grid Connected Shunt Active Power Filter Based on Adaptive Q-LMF Control Technique Objective: The main objective of this project is to improve power quality in dynamic conditions in Three-Phase grid connected applications by using SAPF based on Q-LMF control Technique.	Power Quality	ISOA
TEMACS104, TEPGCS98, TEMAPE324,	Predictive Control of PMSG- Based Hydro-Electric System with Battery Supported UPQC	Power Quality	ANN based SMC



TEPGPE291, TEMAPS843, TEPGPS834 TEPGCS97, TEPGCS97, TEMACS103, TEPGPS832,	Objective: The main objective of this project is to propose a predictive control to achieve efficient, stable, and high-quality power generation and distribution from the PMSG-based hydro- electric system, supplemented by the battery-supported UPQC Enhanced the Hosting Capacity of a Photovoltaic Solar System Through the	Power Quality	Genetic Algorithm
TEMAPS841	Utilization of a Model Predictive Controller Objective: The main objective of this project is to enhance the hosting capacity of a photovoltaic solar system by utilizing a Model Predictive Controller (MPC) to efficiently manage power flow, thereby maximizing the integration of renewable energy.		
TEMAPS833, TEMAPS834, TEPGPS824, TEPGPS825, TEMACS102, TEPGCS96	ExperimentalInvestigationsonPhotovoltaicInterfaceNeutralPointClampedMultilevelInverter-BasedShuntActivePowerFiltertoEnhanceGridPower QualityObjective:The main objective ofthisprojectistoenhancethepowerqualitybyusingPV	Power Quality	PSO



	interfaced NPC-MLI based shunt		
	active power filter in grid related		
	applications.		
TEMAPS823,	Advance Controller for Power	Power	New Sliding
TEMAPS824,	Quality and	Quality	Mode Reaching
TEPGPS814,	Performance Improvement of		Law
TEPGPS815,	Grid-Connected Single-Phase		
TEMACS100,	Rooftop PVS		
TEPGCS94			
	<b>Objective:</b> The main objective of		
	this project is to enhance power		
	quality and to improve		
	performance of grid-connected		
	single phase roof top photo-		
	voltaic systems by optimizing		
	stable, efficient integration with		
	the grid.		
TEMAPS817,	Power Quality Improvement	Power	Dual-Fuzzy
TEPGPS813	in Commercial and Industrial	Quality	Sugeno
	Sites: An Integrated Approach		Method
	Mitigating Power Oscillations		
	<b>Objective:</b> The main objective of		
	this project is to develop		
	advanced control strategies and		
	state of the art technologies to		
	stabilize voltage and frequency,		
	reduce oscillations, and ensure a		
	reliable and efficient power		
	supply, ultimately improving		
	operational efficiency and		
	minimizing downtime.		
TEMAPS828,	Dual Fuzzy-Sugeno Method to	Power	ISOA
TEMAPS829,	Enhance Power Quality	Quality	
TEPGPS819,	Performance using a Single-		
TEPGPS820	phase Dual UPQC-Dual PV		
	Without DC-Link Capacitor		
	-		



	<b>Objective:</b> The main objective of this project is enhancing power quality performance superior voltage regulation and load balancing without the use of a DC-Link capacitor in Single- Phase Dual-UPQC and Dual PV.		
TEMAPS844,	Coordinated Control of Grid-	Power	Ingenious
TEMAPS845, TEPGPS835, TEPGPS836, TEMAED233, TEPGED227	Connected PMSG Based Wind Energy System with STATCOM and Supercapacitor Energy Storage	Quality	MPPT
	<b>Objective:</b> The main objective of		
	this project is to propose a		
	coordinated control of grid		
	connected PMSG based wind		
	energy system with STATCOM		
	and supercapacitor energy storage		
	systems.		
TEMAPS803, TEPGPS802	VoltageSag,Swell,andInterruptionCompensationUsingDVRBasedonEnergyStorageDeviceObjective:The main objective of	Power Quality	Dual Phase Shift based PWM
	this project is to compensate		
	voltage sag and swell by using		
	DVR based on Energy Storage		
	Device.		
TEMAPS804, TEMACS97, TEPGPS804, TEPGCS91	SmallSignalModelingandPerformanceAnalysisofConventional- and Dual-UPQC	Power Quality	Predictive Control



	Objective: The main objective of		
	this project is to analyze the		
	performance of conventional and		
	Dual-UPQC in a grid connected		
	system.		
TEMAPS914,	Protection and Power	5	NSMC
TEPGPS904,	Smoothing of a DFIG/DC	Systems	
TEMAPS915,	Microgrid Hybrid Power		
TEPGPS905	System With SMES-Based Unified Power Ouality		
	Unified Power Quality Conditioner		
	Conditioner		
	<b>Objective:</b> The primary		
	objective of this paper is to		
	develop a superconducting		
	magnetic energy storage		
	(SMES)-based unified power		
	quality conditioner (UPQC) to		
	enhance power quality, ensure		
	protection, and smooth power		
	fluctuations in a hybrid DFIG/DC micro grid system. The		
	proposed system addresses low-		
	voltage ride-through (LVRT)		
	issues and power instability		
	caused by renewable energy		
	variability and grid faults.		
TEMAPS911,	Energy Management Algorithm	Hybrid	ISOA
TEPGPS901,	Of Hybrid DC Microgrid Using	Systems	
TEMACS879, TEPGCS125	MPC Approach		
166603125	<b>Objective:</b> The main objective of		
	the project is to develop an		
	advanced energy management		
	system leveraging the Model		



	Predictive Control (MPC) technique. This system aims to optimize power flow, balance supply and demand among renewable sources, storage systems, and loads, enhance system efficiency, ensure reliable operation, and adapt to dynamic conditions in a hybrid DC microgrid.		
TEMAPS896, TEPGPS886, TEMAPE354, TEPGPE321	Energy Management in Multi- Source Power System Based on PV /Wind /Batteries / Diesel Generator Connected with The Grid Objective: The main objective of this project is to achieve optimized energy allocation within a multi- source power system that integrates photovoltaic (PV) panels, wind turbines, batteries, diesel generators, and grid connectivity to manage and distribute energy efficiently based on real-time availability and	Hybrid Systems	CSA
TEMAPS894, TEPGPS884, TEMAPE353,	demandHybridEnergySystemSimulationandModellingIncorporatingWindand	Hybrid Systems	Trapezoidal MPPT
TEPGPE320	<b>Power</b> <b>Objective</b> : The main objective of this paper is to model and simulate a hybrid energy system that combines wind and solar power, aiming to assess its performance,		



TEMAPS891, TEPGPS881, TEMACS874, TEPGCS120, TEMAPS892, TEPGPS882	improveenergyreliability,andsupporttheintegrationofrenewablesourcesfor sustainableenergypoulctionNovel Hybrid Fuzzy/Rule-based Energy Management forGridconnected Hybrid EnergyStorage SystemObjective:This main objective ofthis project is to develop aneffectiveenergymanagementstrategy(EMS)for a hybridenergy storagesystem(HESS)composedof batteriesandsupercapacitors. This EMS aims tooptimizepowerallocationbetweenthebatteryandsupercapacitors. This EMS aims tooptimizepowerallocationbetweenthebatteryandsupercapacitor,enhancethebatteriesandsupercapacitors. This EMS aimssupercapacitor,enhance	Hybrid Systems	STSMC
TEMAPS890, TEPGPS880, TEMAPE350, TEPGPE317	Grid-Connected Renewable underHybrid System Operating ConditionsObjective:The main objective of this project is to ensure stable and efficient powerby supplyoptimallyintegrating and wind with	Hybrid Systems	Dual Fuzzy Sugeno Controller



	the grid. It aims to maintain power quality, maximize renewable energy utilization, and ensure reliable energy dispatch under varying operating conditions.		
TEMAPS888, TEMAPS889, TEMACS873, TEPGPS878, TEPGPS879, TEPGCS119	A Novel Fuzzy/SMC based Energy Management Strategy for Hybrid Energy Storage System in an Isolated DC Microgrid	Hybrid Systems	Genetic Algorithm
	<b>Objective</b> : The main objective of this project is to implement an energy management strategy for hybrid energy storage system in an isolated DC microgrid using a Novel Fuzzy and SMC based controlling topology.		
TEMAPS887, TEMACS872, TEPGPS877, TEPGCS118	Neural Network Based Voltage Source Converter for Power Management of Hybrid Energy System	Hybrid Systems	STSMC
	<b>Objective:</b> The Main objective of this project is to develop a Power Management System for a Hybrid Energy System by using an ANN controller-based Voltage Source Converter.		
TEMAPS885, TEMAPS886, TEPGPS875, TEPGPS876, TEMACS871, TEPGCS117	A Novel Cooperative Control for SMES-Battery Hybrid Energy Storage in PV Grid- Connected System Objective: The main objective of	Hybrid Systems	STSMC



	this project is to propose a novel cooperative control for SMES/Battery Hybrid Energy Storage in PV-Grid Connected System to meet escalating power demand.		
TEMAPS865, TEPGPS855, TEMAPS866, TEPGPS856, TEMACS857, TEPGCS103	Smooth and Uninterrupted Operation of Standalone DC Microgrid Under High and Low Penetration of RESsObjective: The main objective of the project to ensure that a standalone DC microgrid operates seamlessly and without interruption, regardless of the fluctuations in Renewable Energy Sources (RESs). This involves maintaining a stable power supply in spite of varying levels of RES penetration.	Hybrid Systems	CSA
TEPGPS841, TEPGPS840, TEMAPS850, TEMAPS849	Grid-InteractiveSmoothTransitionControl of Wind-Solar-DGBasedMicrogridatUnpredictableWeatherConditionsObjective:Objective:The main objective ofthe project is to develop a reliablemicrogridsystemintegratingwind, solar, and diesel generator(DG)powersourcesto ensurecontinuouspowersupplyduringboth on-gridand off-gridUnpredictableWeatherConditions.	Hybrid Systems	Genetic Algorithm



TEMAPS831, TEPGPS822, TEMAED226, TEPGED220	HESS management for Virtual Inertia,Frequency and Voltage Support through Off-board EV Bidirectional ChargersObjective: The main objective of this project is to enhance grid stability by dynamically balancing	Hybrid Systems	Dual Phase Shift based PWM
	power supply and demand, providing rapid frequency response and maintaining voltage levels.		
TEMAPS813, TEMAPS814, TEPGPS818, TEMAPS808, TEMAPS809, TEMAPS810, TEPGPS808, TEPGPS809, TEPGPS810, TEPGPS810, TEPGED212	Modelling and Coordinated Control of GridConnected Photovoltaic, Wind Turbine Driven PMSG, and Energy Storage Device for a Hybrid DC/AC MicrogridObjective: The main objective of this project is to optimize the performance and integration of grid-connected photovoltaic systems, wind-turbine driven PMSGs and energy storage devices within a hybrid dc-ac microgrid through advanced modelling and coordinated control strategies.	Hybrid Systems	STSMC
TEMAPS798, TEMAPS799, TEMAPS800, TEPGPS797, TEPGPS798, TEPGPS799,	Mitigating Uncertainty Problems of Renewable Energy Resources Through Efficient Integration of Hybrid Solar PV/Wind Systems into Power Networks	Hybrid Systems	STSMC



TEMAPE300, TEMAPE301, TEPGPE272, TEPGPE273	<b>Objective:</b> The main objective of this project is to mitigate the problems of renewable energy resources through efficient integration of Hybrid Solar PV/Wind systems into power networks.		
TEMAPS909, TEMAPS910, TEPGPS899, TEPGPS900, TEMAPE362, TEPGPE329	A Novel Nonisolated Four-PortConverter forFlexibleDCMicrogridOperationObjective: The main objective ofthis project is to propose a novelnon-isolated four-port converterforflexibleDCmicrogridoperation.	Microgrid	New Sliding Mode Reaching Law
TEMAPS902, TEMAPS903, TEPGPS892, TEPGPS893	An Adaptive Control Strategy ofIslandedHybridMicrogridConsideringtheCooperativeOperationofPV-EnergyStorage-Diesel GeneratorObjective:The main objective ofthis project is to operate theislandedmicrogridbyimplementing an adaptive controlstrategywiththecooperativeoperationofPV-EnergyStorage-	Microgrid	FPPT
TEMAPS874, TEPGPS864, TEMAPE338,	An Unbalance and Power Controller Allowing Smooth Islanded Transitions in Three-	Microgrid	New Sliding Mode Reaching Law



TEPGPE305	Phase Microgrids		
	<b>Objective</b> : The main objective of		
	this project is to develop a power		
	controller for seamless islanded		
	transitions in three-phase		
	microgrids, ensuring stable		
	voltage and frequency during grid-		
	to-island mode shifts.		
TEMAPS865,	Smooth and Uninterrupted	Microgrid	CSA
TEPGPS855,	Operation of		
TEMAPS866,	Standalone DC Microgrid		
TEPGPS856,	Under High		
TEMACS857,	and Low Penetration of RESs		
TEPGCS103			
	<b>Objective:</b> The main objective of		
	the project to ensure that a		
	standalone DC microgrid operates		
	seamlessly and without		
	interruption, regardless of the		
	fluctuations in Renewable Energy		
	Sources (RESs). This involves		
	maintaining a stable power supply		
	in spite of varying levels of RES		
	penetration.		<b>2</b>
TEMAPS862, TEPGPS852,	Improving Active Resonance	Microgrid	Optimized PI
TEMAPE330,	Damping and Unbalanced		
TEPGPE297,	Voltage Mitigation Based on		
TEMAPS863,	Combined DDSRF and Washout		
TEPGPS853	Filter in Islanded Microgrids		
	<b>Objective:</b> The main objective of this		
	project is to develop and implement a		
	combined approach using Double		
	Decoupled Synchronous Reference		



	Frame (DDSRF) and Washout Filter techniques to enhance active resonance damping and mitigate unbalanced voltage conditions in islanded microgrids. This combined approach aims to improve the stability, reliability, and power quality of islanded microgrids, ensuring efficient and continuous operation under varying load and generation conditions.		
TEMAPS860,	Voltage Feed-Forward Control	Microgrid	Ant Colony
TEMAPS861,	of Photovoltaic Battery DC		Optimization
TEPGPS850,	Microgrid Based on Improved		
TEPGPS851,	Seeker Optimization		
TEMAPE328, TEPGPE295	Algorithm		
	<b>Objective:</b> The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).		
TEPGPS841, TEPGPS840,	Grid-Interactive Smooth Transition Control of Wind-	Microgrid	Genetic Algorithm
TEMAPS850,	Solar-DG Based Microgrid at		mgoritim
TEMAPS849	Unpredictable Weather		
	Conditions		
	<b>Objective:</b> The main objective of the project is to develop a reliable microgrid system integrating wind, solar, and diesel generator (DG) power sources to ensure continuous power supply during both on-grid and off-grid modes in Unpredictable Weather Conditions.		



TEPGPS839,	Active Power Sharing Scheme	Microgrid	ISOA
TEMAPS848,	in a PV Integrated DC		
TEPGPS838,	Microgrid With Composite		
TEMAPS847	Energy Storage Devices		
	<b>Objective:</b> The main objective of		
	this project is to optimize power		
	distribution among storage		
	systems to enhance stability and		
	efficiency. This ensures balanced		
	power output, improved system		
	reliability, and voltage stability.		
TEMACS99,	Impedance Model Based	Microgrid	STSMC
TEPGCS93,	Coordination Control of		
TEMAPS811,	Secondary Ripple in DC		
TEPGPS811	Microgrid		
	<b>Objective:</b> The main objective of		
	this project is to develop a		
	continuous coordination control		
	method based on impedance		
	models for mitigating secondary		
	ripple in DC Microgrids		



		DOMAIN	EXTENSION
TITLE ID	TITLE	DOMAIN	TOPIC
TEMAPS911, TEPGPS901,	Energy Management Algorithm Of Hybrid DC Microgrid Using MPC	Hybrid Systems	ISOA
TEMACS879,	Approach	Systems	
TEPGCS125			
	Objective: The main objective of the		
	project is to develop an advanced		
	energy management system leveraging		
	the Model Predictive Control (MPC)		
	technique. This system aims to optimize		
	power flow, balance supply and demand		
	among renewable sources, storage		
	systems, and loads, enhance system		
	efficiency, ensure reliable operation,		
	and adapt to dynamic conditions in a		
	hybrid DC microgrid.		
TEMAPS901,	PV Systems Operating in Dynamic	Control	Ant Colony
TEPGPS891,	Climatic	Systems	based MPPT
TEMACS878, TEPGCS124	Circumstances Using a PSO-based		
TEPGC5124	SMC and PID Controller		
	Objective: The main objective of this		
	project is to develop a robust control		
	scheme for photovoltaic (PV) systems		
	operating under dynamic climatic		
	conditions using a hybrid approach		
	combining Particle Swarm Optimization		
	(PSO)-based Sliding Mode Control		
	(SMC) control.		

## 2024 – 2025 EEE Control Systems IEEE TITLES



TEMAPS895,	Implementation of Fuzzy and Neural	Control	GA Based
TEPGPS885,	Networks-Based MPPT Techniques	Systems	MPPT
TEMACS877, TEPGCS123	on Solar PV System		
	<b>Objective</b> : The main objective of this project is to implement Fuzzy and Neural Networks based MPPT techniques for Solar PV System performance enhancement.		
TEMAPE352, TEPGEP319, TEMACS876, TEPGCS122	Analysis and Improvement of Transient Voltage Stability for Grid- Forming Converters	Control Systems	ANN Controller
	<b>Objective</b> : The main objective of this project is to analyze and improve the transient voltage stability of grid- forming converters (GFCs) in power systems.		
TEMAPS893, TEMACS875, TEMAPE351, TEPGPS883, TEPGCS121, TEPGPE318	A Fast-response Power-Flow Control Strategy of MMC-UPFC based on Active Disturbance Rejection Control	Control Systems	STSMC
	<b>Objective:</b> The primary objective of this paper is to develop a rapid power flow control strategy for the Modular Multilevel Converter-Unified Power Flow Controller (MMC-UPFC) using Active Disturbance Rejection Control (ADRC).		
TEMAPS891, TEPGPS881,	Novel Hybrid Fuzzy/Rule-based Energy Management for Grid	Control Systems	STSMC



TEMACS874, TEPGCS120, TEMAPS892, TEPGPS882	connected Hybrid Energy Storage System Objective: This main objective of this project is to develop an effective energy management strategy (EMS) for a hybrid energy storage system (HESS) composed of batteries and supercapacitors. This EMS aims to optimize power allocation between the battery and supercapacitor, enhance the dynamic response of the system, stabilize the DC bus voltage, and extend the lifespan of the battery.		
TEMAPS890, TEPGPS880, TEMAPE350, TEPGPE317	<ul> <li>Grid-Connected Hybrid Renewable</li> <li>Energy System under Various</li> <li>Operating Conditions</li> <li>Objective: The main objective of this</li> <li>project is to ensure stable and efficient</li> <li>power supply by optimally integrating</li> <li>renewable sources like solar and wind</li> <li>with the grid. It aims to maintain power</li> <li>quality, maximize renewable energy</li> <li>utilization, and ensure reliable energy</li> <li>dispatch under varying operating</li> <li>conditions.</li> </ul>	Control Systems	Dual Fuzzy Sugeno Controller
TEMAPS888, TEMAPS889, TEMACS873, TEPGPS878,	A Novel Fuzzy/SMC based Energy Management Strategy for Hybrid Energy Storage System in an Isolated DC Microgrid	Control Systems	Genetic Algorithm



I STSMC
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l Dual Fuzzy
s Sugeno
Controller



TEMACS869,	Speed Regulation of PMSM Systems	Control	Model
TEPGCS115,	Based	Systems	Predictive
TEMAED247,	on a New Sliding Mode Reaching		Controller
TEPGED241	Law		
	<b>Objective</b> : The objective of the project is to develop a novel sliding mode reaching law to enhance the speed regulation of Permanent Magnet Synchronous Motor (PMSM) systems. This approach aims to improve robustness and accuracy in speed control by mitigating the effects of disturbances and parameter variations.		
TEMAPE346, TEPGPE313, TEMAED246, TEPGED240, TEMACS868, TEPGCS114	Torque Ripple Suppression of BLDCM WithOptimal Duty Cycle and Switch State by FCS-MPCObjective: The main objective of the project is to suppress torque ripples in Brushless DC (BLDC) motors by implementing a Finite Control Set Model Predictive Control (FCS-MPC) scheme. This approach aims to enhance motor performance by minimizing torque fluctuations, thereby improving efficiency	Control Systems	Optimized PI
TEMAPS884, TEMACS867, TEPGPS874, TEPGCS113	A Novel Coordinated Control Strategy for Frequency Regulation of MMC-HVDC Connecting Offshore Wind Farm	Control Systems	Model Predictive Controller
	<b>Objective:</b> The main objective of this project is to regulate the frequency by		



TEMAPS880, TEPGPS870, TEMACS865, TEPGCS111	<ul> <li>using a novel coordinated control strategy for MMC-HVDC systems connecting offshore wind farms (OWFs)</li> <li>Dual-Sequence Synchronization Stability Analysis and Control of Multi-Paralleled Wind Farms During Asymmetrical Grid Faults</li> <li>Objective: The main objective of this project is to implement stability assessment method and a current control strategy to achieve the margin of dual- sequence synchronization under</li> </ul>	Control Systems	STSMC
	asymmetrical grid faults.		
TEMAPS883, TEPGPS873, TEMACS866, TEPGCS112, TEMAPE344, TEPGPE311	An Adaptive Fuzzy Controller- Based Distributed Voltage Control Strategy for a Remote Microgrid System With Solar Energy and Battery Support Objective: The main objective of this project is to propose an adaptive fuzzy controller-based distributed voltage control strategy for a remote microgrid system with solar energy and battery support.	Control Systems	ANN based MPPT
TEMAPS879, TEPGPS869, TEMACS864, TEPGCS110, TEMAED242, TEPGED236	Generalized DSC-FDC-PLLBased Synchronization of PV Array-BESFed Water Pump System WithUtility GridObjective: The Main objective of thisproject is to develop and implement ageneralized delayed signal cancellation	Control Systems	ISOA



TEMACS863, TEMAPE340, TEPGCS109, TEPGPE307	<ul> <li>(GDSC)-based phase-locked loop (PLL) for synchronizing a photovoltaic (PV) array and battery-supported water pump system with the utility grid, ensuring efficient power management in both grid-connected and islanded modes.</li> <li>Adaptive Control for Improved Virtual</li> <li>Synchronous Generator Under Imbalanced Grid Voltage</li> <li>Objective: The main objective of this project is to develop an adaptive control strategy for a Virtual Synchronous</li> <li>Generator (VSG) that enhances performance and stability under</li> </ul>	Control Systems	STSMC
TEMAPS877, TEPGPS867, TEMACS862, TEPGCS108	<ul> <li>imbalanced grid voltage conditions.</li> <li>Virtual Synchronous Generator Control Strategy of Grid-Forming Matrix Converter for Renewable Power Generation</li> <li>Objective: The main objective of this project is to enhance grid stability and mimic the inertia of conventional synchronous generators. This approach ensures smooth integration of renewable energy sources into the power grid by regulating voltage and frequency, thereby improving system reliability and providing support during grid</li> </ul>	Control Systems	STSMC



	disturbances.		
TEMAPS873,	Optimized PI Gain in UPQC Control	Control	Dual Fuzzy
TEPGPS863,	Based on Improved Zero Attracting	Systems	Sugeno
TEMACS861,	Normalized LMS		Controller
TEPGCS107			
	<b>Objective:</b> The main objective of this		
	project is developing an enhanced		
	control scheme for a 4-wire unified		
	power quality conditioner (UPQC)		
	using the improved reweighted zero		
	Attracting normalized LMS (IRZA-		
	NLMS) and self-adaptive multi		
	population Rao (SAMP-Rao)		
	optimization to effectively mitigate		
	power quality issues.	Castal	CCA Deced
TEMAPS871, TEPGPS861,	GAO Optimized Sliding Mode Based Reconfigurable Step Size Pb&O	Control	CSA Based STSMC
TEMAED240,	MPPT	Systems	SISMU
TEPGED234,	Controller With Grid Integrated		
TEMACS860,	EV Charging Station		
TEPGCS106			
	<b>Objective:</b> The main objective of this		
	project is to develop a GAO-optimized		
	sliding mode-based reconfigurable step		
	size Pb&O MPPT controller to		
	maximize the efficiency of PV systems.		
	This system will seamlessly integrate with grid-connected EV charging		
	with grid-connected EV charging stations, ensuring optimal energy		
	utilization and reliable 24/7 charging.		
TEMAPS868,	Modulated Predictive Current	Control	CSA
TEMAPE334,	Control of	Systems	
TEMACS858,	Photovoltaic Central NPC Inverter		
TEPGPS858,	With		
TEPGPE301,	Reduced Computational Burden		
TEPGCS104			



	<b>Objective:</b> The main objective of this project is to develop and implement a modulated predictive current control strategy for a photovoltaic central NPC inverter, to enhance performance while minimizing computational demands.		
TEMACS859,	Grid-Connected Converter with	Control	Dual Phase
TEPGCS105,	Grid-Forming and Grid-Following	Systems	Shift based
TEMAPE335,	Modes Presenting Symmetrical and		PWM
TEPGPE302	Asymmetrical Fault Ride-Through		
	Capability		
	<b>Objective:</b> The main objective of this project is to propose a grid-connected converter with grid-forming and grid following modes presenting symmetrical and asymmetrical fault ride-through capability.		
TEMAPS865,	Smooth and Uninterrupted Operation	Control	CSA
TEPGPS855,	of	Systems	
TEMAPS866,	Standalone DC Microgrid Under		
TEPGPS856,	High		
TEMACS857,	and Low Penetration of RESs		
TEPGCS103			
	<b>Objective:</b> The main objective of the project to ensure that a standalone DC microgrid operates seamlessly and without interruption, regardless of the fluctuations in Renewable Energy Sources (RESs). This involves maintaining a stable power supply in spite of varying levels of RES penetration.		
TEMAPS859,	A Fuzzy-Based Adaptive P&O MPPT	Control	ISOA
TEMACS855,	Algorithm for PV Systems with Fast	Systems	
TEPGPS849,	Tracking and Low Oscillations		
TEPGCS101	Under Rapidly Irradiance Change Conditions		



	<b>Objective:</b> The main objective of this project is to get fast tracking and low		
	oscillations under rapidly irradiance		
	change conditions in PV system by		
	using Fuzzy-Based adaptive P&O		
	MPPT Algorithm.		
TEMAPS864,	Circle Search Algorithm-Based	Control	Genetic
TEMACS856,	Super Twisting Sliding Mode	Systems	Algorithm
TEPGPS854,	Control for MPPT of Different		
TEPGCS102,	Commercial PV Modules		
TEMAPE331,			
ТЕМАРЕЗЗ2,	The main objective of this project is to		
TEPGPE298,	implement a circle search algorithm		
TEPGPE299	based super twisting sliding mode		
	control for MPPT of different		
	commercial PV modules.		
TEMACS853,	An Advanced Control Strategy for a	Control	ISOA
TEMAPS851,	Weak	Systems	
TEPGPS842,	Grid-Connected DG for Enhancing		
TEPGCS99	Voltage		
	Support During Co-occurrence of		
	Sag and Swell		
	<b>Objective:</b> The main objective of this		
	project is advanced control strategy for		
	a weak grid-connected DG system is to		
	ensure stable operation, enhance voltage		
	support, and improve overall power		
	quality during sag and swell events. By		
	achieving these, strategy contributes to		
	reliable and efficient integration of DG		
	into the grid, supporting sustainable		
	energy practices and enhancing grid resilience.		
TEMAPS854,	Improved Photovoltaic MPPT	Control	CSA
TEMACS854,	Algorithm Based on Ant Colony	Systems	



TEPGPS845, TEPGCS100	OptimizationandFuzzyLogicUnderConditionsofPartialShadingObjective:The main objective of this		
	project is to get the improved performance from PV array by using the AFO based MPPT algorithm under		
	partial shading conditions.		
TEMACS104,	Predictive Control of PMSG-Based	Control	ANN based
TEPGCS98,	Hydro-Electric System with Battery	Systems	SMC
TEMAPE324,	Supported UPQC		
TEPGPE291,			
TEMAPS843,	Objective: The main objective of this		
TEPGPS834	project is to propose a predictive control		
	to achieve efficient, stable, and high-		
	quality power generation and		
	distribution from the PMSG-based		
	hydro-electric system, supplemented by		
TEPGCS97,	the battery-supported UPQC Enhanced the Hosting Capacity of a	Control	Genetic
TEMACS103,	Photovoltaic Solar System Through		Algorithm
TEPGPS832,	the Utilization of a Model	Systems	Algorium
TEMAPS841	Predictive Controller		
	Objective: The main objective of this		
	project is to enhance the hosting		
	capacity of a photovoltaic solar system		
	by utilizing a Model Predictive		
	Controller (MPC) to efficiently manage		
	power flow, thereby maximizing the		
	integration of renewable energy.		
TEMAPE320,	Sliding Mode Control of Vienna	Control	Genetic
TEPGPE287,	Rectifier Under Unbalanced Weak	Systems	Algorithm
TEMACS101,	Power Grid		
TEPGCS95			



	<b>Objective:</b> The main objective of this		
	project is to control the Vienne Rectifier		
	by using Sliding Mode Controller under		
	unbalanced weak power grid.		
TEMAPS833,	Experimental Investigations on	Control	PSO
TEMAPS834,	Photovoltaic Interface Neutral	Systems	130
TEPGPS824,	Point Clamped Multilevel Inverter-	- ,	
TEPGPS825,	Based Shunt Active Power Filter to		
TEMACS102, TEPGCS96	Enhance Grid Power Quality		
	<b>Objective:</b> The main objective of this		
	project is to enhance the power quality		
	by using PV interfaced NPC-MLI based		
	shunt active power filter in grid related		
	applications.		N CITI
TEMAPS823,	Advance Controller for Power	Control	New Sliding
TEMAPS824, TEPGPS814,	Quality and Performance Improvement of Grid-	Systems	Mode Reaching
TEPGPS815,	Connected Single-Phase Rooftop		Law
TEMACS100,	PVS		Law
TEPGCS94			
	<b>Objective:</b> The main objective of this		
	project is to enhance power quality		
	and to improve performance of grid-		
	connected single phase roof top		
	photo-voltaic systems by optimizing		
	power output and ensuring stable,		
TEMAPS804,	efficient integration with the grid.SmallSignalModelingand	Control	Predictive
TEMAPS804, TEMACS97,	Performance Analysis of	Systems	Control
TEPGPS804,	Conventional- and Dual-UPQC	Systems	Control
TEPGCS91			
	Objective: The main objective of this		
	project is to analyze the performance of		
	conventional and Dual-UPQC in a grid		
	connected system.		



TEMAPS807,	Designing of a PSO-Based Adaptive	Control	Genetic
TEPGPS807,	SMC With a Multilevel Inverter for	Systems	Algorithm
TEMAPE304,	MPPT of PV		
TEPGPE276,	Systems Under Rapidly Changing		
TEMACS98, TEPGCS92	Weather Conditions		
	<b>Objective:</b> The main objective of this		
	project is to design a PSO-based		
	Adaptive SMC with a Multilevel		
	Inverter for MPPT of PV Systems		
	Under Rapidly Changing Weather Conditions to enhance the overall		
	efficiency and stability of the PV		
	system.		
TEMAPS795,	Enhancement of Solar PV Efficiency	Control	Fixed
TEPGPS794,	Using Double Integral Sliding Mode	Systems	Power Point
TEMAPE296,	MPPT Control		Tracking
TEPGCS89,			
TEMAPE221, TEPGPE193,	<b>Objective:</b> The main objective of this		
TEPGPE194	project is to enhance the efficiency of		
	Solar Photovoltaic (PV) Panels through		
	the implementation of a Double Integral		
	Sliding Mode Maximum Power Point		
	Tracking (MPPT) Control Strategy.		
TEMACS99,	Impedance Model Based	Control	STSMC
TEPGCS93,	Coordination Control of Secondary	Systems	
TEMAPS811,	Ripple in DC Microgrid		
TEPGPS811	Objective. The main objective of this		
	<b>Objective:</b> The main objective of this project is to develop a continuous		
	coordination control method based on		
	impedance models for mitigating		
	secondary ripple in DC Microgrids		



S.NO	TITLE	DOMAIN	EXTENSION TOPIC
TEMAPS909,	A Novel Nonisolated Four-Port Converter	DC-DC	New Sliding
TEMAPS910,	for Flexible DC Microgrid Operation	Converters	Mode
TEPGPS899,			Reaching
TEPGPS900,			Law
TEMAPE362,	<b>Objective</b> : The main objective of this		
TEPGPE329	project is to propose a novel non-isolated		
	four-port converter for flexible DC		
	microgrid operation.		
TEMAPS904,	Evaluating the Performance of MPPT	DC-DC	Ant Colony
TEPGPS894,	and FPPT Approach in Standalone Solar	Converters	Optimization
TEMAPE358, TEPGPE325	PV Systems Under Variable Conditions		
111011323			
	<b>Objective</b> : The main objective of this		
	project is to analyze and compare the performance of Maximum Power Point		
	Tracking (MPPT) and Fixed Power Point		
	Tracking (FPPT) algorithms in standalone		
	solar photovoltaic (PV) systems under		
	varying environmental conditions, such as		
	changes in solar irradiance and temperature.		
TEMAPE327,	Multifunctional Integrated DC-DC	DC-DC	Optimized PI
TEMAED237,	Converter for Electric Vehicles	Converters	
TEPGPE294, TEPGED231	<b>Objective:</b> The main objective of this		
IEFGED251	project is to develop a single integrated DC-		
	DC converter that can perform multiple		
	functions (G2V, V2G, and LDC modes)		
	efficiently, reducing the number of		
	components, complexity, and overall cost,		
	while improving the performance and		
	reliability of power conversion in electric vehicles		
	venicies		

## **2024 – 2025 EEE POWER ELECTRONICS IEEE TITLES**



TEMACS856, TEPGPS854, TEPGCS102, TEMAPE331, TEMAPE332, TEMAPS860, TEPGP298, TEPGPS851, TEPGPS851, TEPGPS851, TEPGPS851, TEPGPS851, TEPGPS851, TEPGPS851, TEPGP295Twisting sliding mode control for MPPT of different commercial PV modules.ConvertersAlgorithm0Voltage Feed-Forward Control of MPPT of Different commercial PV modules.Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersAnt Colony Optimization Optimization AlgorithmTEMAPE326, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual Fuzzy Sugeno MethodTEMAPE326, TEPGPE295Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DC ConvertersDual Fuzzy Sugeno MethodTEPGPE288, TEPGP2884, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Baed on the Trapezoidal RuleDC-DC ConvertersHybrid Systems	TEMAPS864,	Circle Search Algorithm-Based Super	DC-DC	Genetic
TEPGPS854, TEPGCS102, TEMAPE331, TEMAPE331, TEMAPE332, TEPGPE299ModulesImplement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.DC-DCAnt ColonyTEMAPS860, TEPGPE299Voltage Feed-Forward Control of Photovoltaic Battery DC Microgrid Based on Improved Seeker Optimization AlgorithmDC-DCAnt ColonyTEMAPS861, TEPGPS851, TEPGPS851, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCDual FuzzyTEMAPE326, TEPGPE295A Boost-LC Resonance Multimode DC- Optimization Algorithm (ISOA).DC-DCDual FuzzySugeno TEPGPE293, TEPGPE294Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCDual FuzzyTEPGPE288, TEPGPE384, TEPGPS826, TEMAPS355A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridTEPGPS826, TEMAPS355Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid		<u> </u>		
TEPGCS102, TEMAPE331, TEMAPE332, TEPGPE299ModulesImage: main objective of this project is to implement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.DC-DCAnt Colony OptimizationTEMAPS860, TEPGPS851, TEPGPS851, TEPGPE295Voltage Feed-Forward Control of Photovoltaic Battery DC Microgrid Based on Improved Seeker Optimization AlgorithmDC-DCAnt Colony OptimizationTEMAPS851, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCDual FuzzyTEMAPE326, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE294A boost-LC Resonance Multimode DC- DC Converter for EV Charger ApplicationDC-DC ConvertersDual FuzzyTEPGPE298, TEPGPE288, TEMAPE321, TEPGPE385, TEPGPE385A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersMybrid SystemsTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersHybrid Systems				8
TEMAPE331, TEMAPE332, TEPGPE298, TEPGPE299, TEPGPE39, TEPGPE304The main objective of this project is to implement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.DC-DCAnt Colony OptimizationTEMAPS860, TEPGPS851, TEPGPS851, TEPGPE3851, TEPGPE3851, TEPGPE328, TEPGPE328, TEPGPE328, TEPGPE329,Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC DC-DC ConvertersDual Fuzzy Sugeno MethodTEMAPE326, TEPGPE293, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGE229, TEPGPE233, TEPGE229, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE326, TEMAPE321, TEPGPE326, TEPGPE33, TEPGPE33, TEPGPE33, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEPGPE326, TEMAPE321, TEMAPE321, TEPGPE326, TEMAPE321, TEMAPE321, TEMAPE321, TEMAPE321, TEMAPE323, TEMAPE321, TEMAPE321, TEMAPE321, TEMAPE323, TEMAPE321, TEMAPE321, TEMAPE323, TEMAPE321, TEMAPE321, TEMAPE323, TEMAPE323, TEMAPE321, TEMAPE323, TEMAPE321, TEMAPE323, TEMAPE326, TEMAPE326, TEMAPE326, TEMAPE326, TEMAPE335, <th>-</th> <th></th> <th></th> <th></th>	-			
TEMAPE332, TEPGPE298, TEPGPE299The main objective of this project is to implement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.DescriptionTEMAPS860, TEPGPS851, TEPGPS851, TEPGPS851, TEPGPE295Voltage Feed-Forward Control of Based on Improved Seeker Optimization AlgorithmDC-DC ConvertersAnt Colony OptimizationTEMAPE328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual Fuzzy Sugeno MethodTEMAPE326, TEPGE235, TEPGE239, TEPGE229A Boost-LC Resonance Multimode DC- DC DC Converter for EV Charger ApplicationDC-DC ConvertersDual Fuzzy Sugeno MethodTEPGE229, TEPGE228, TEPGPE38, TEPGPE38, TEPGPE38, TEPGPE38, Technique for a Wind Power System Based on the Trapezoidal RuleDC-DC ConvertersHybrid SystemsTEPGPE386, TEMAPS351A Maximum Power Point tracking (MPPT) technique for a windDC-DC ConvertersHybrid Systems	-			
TEPGPE298, TEPGPE299implement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.Ant ColonyTEMAPS860, TEMAPS861, TEPGPE3851, TEPGPE323Voltage Feed-Forward Control of Photovoltaic Battery DC Microgrid Based on Improved Seeker Optimization AlgorithmDC-DC ConvertersAnt Colony OptimizationTEMAP5328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual Fuzzy SugenoTEMAPE326, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DC DCDC-DC ConvertersDual Fuzzy Sugeno MethodTEPGPE293, TEPGED229Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DC ConvertersDual Fuzzy Sugeno MethodTEPGPE288, TEPGPE288, TEPGPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersHybrid Systems		The main objective of this project is to		
TEPGPE299super twisting sliding mode control for MPPT of different commercial PV modules.Ant ColonyTEMAPS860, TEMAPS861, TEPGPS850, TEPGPS850, TEPGPS851, TEPGPS235Voltage Feed-Forward Control of Photovoltaic Battery DC Microgrid Based on Improved Seeker Optimization AlgorithmDC-DC ConvertersAnt Colony OptimizationTEMAPS328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual Fuzzy SugenoTEMAPE326, TEPGPE293, TEPGE293, TEPGE229A Boost-LC Resonance Multimode DC- DC DCDC-DC ConvertersDual Fuzzy Sugeno MethodTEPGPE293, TEPGE229Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DC ConvertersDual Fuzzy Sugeno MethodTEPGPE288, TEPGPS264, TEMAPS321, TEPGPS8264, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersHybrid SystemsTEPGPS8264, TEMAPS835Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DC ConvertersHybrid		· · · ·		
MPPT of different commercial PV modules.Control of DC-DCAnt ColonyTEMAPS860, TEMAPS861, Photovoltaic Battery DC Microgrid TEPGPS850, Based on Improved Seeker TEPGPS851, TEMAPE328, TEPGPE295Doticutic Battery DC Microgrid Optimization AlgorithmConvertersOptimization Optimization AlgorithmTEMAPE328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCDual FuzzyTEMAPE326, TEPGPE293, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DCDual FuzzySugeno TEPGED229Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCMethodTEPGPE288, TEPGPE321, TEPGPE324, TEPGPE325, TEPGPE325,A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridTEPGPE386, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking poject is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	-	super twisting sliding mode control for		
TEMAPS861, TEPGPS850, TEPGPS851, TEPGPE295Photovoltaic Battery DC Microgrid Based on Improved Seeker Optimization AlgorithmConvertersOptimization Improved Seeker Optimization AlgorithmTEMAPE328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual FuzzyTEMAPE326, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE293, TEPGPE284, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE324, TEPGPE324, TEPGPE324, TEPGPE324, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE288, TEPGPE324, TEPGP		MPPT of different commercial PV modules.		
TEPGPS850, TEPGPS851, TEMAPE328, TEPGPE295Based on Improved Seeker Optimization AlgorithmSeeker Optimization AlgorithmObjective:The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCTEMAPE326, TEMAED235, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DCObjective:The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCTEPGPE288, TEPGPE288, TEPGPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCTEPGPS826, TEMAPS835Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DC	TEMAPS860,	Voltage Feed-Forward Control of	DC-DC	Ant Colony
TEPGPS851, TEMAPE328, TEPGPE295Optimization AlgorithmImage: constraint of the state of the st	TEMAPS861,	Photovoltaic Battery DC Microgrid	Converters	Optimization
TEMAPE328, TEPGPE295Objective: The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCDual FuzzyTEMAPE326, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DCDual FuzzyObjective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCDual FuzzyTEPGPE288, TEPGPE284, TEMAPE321, TEPGPS826, TEMAPE3254, TEPGPS8266, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybrid SystemsObjective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEPGPS850,	Based on Improved Seeker		
TEPGPE295 <b>Objective:</b> The main objective of this project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).Image: Control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DC ConvertersDual Fuzzy SugenoTEMAPE326, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DC ConvertersDual Fuzzy SugenoObjective: Tergepezes, range while overcoming the limitations of converters.Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridObjective: Technique for a Wind Power System project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEPGPS851,	Optimization Algorithm		
project is to develop a voltage feed-forward control system for a photovoltaic-battery DC microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DC-DCDual FuzzyTEMAPE326, TEMAED235, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DCDual Fuzzy Sugeno MethodObjective: TEPGED229Converter for EV Charger ApplicationDC-DCDual Fuzzy Sugeno MethodObjective: TEPGED229The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridObjective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEMAPE328,			
InterpretationInterpretationInterpretationInterpretationTEMAPE326, TEMAED235, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DC ConvertersDual Fuzzy SugenoObjective: TEPGED229DC Converter for EV Charger ApplicationDC-DC ConvertersDual Fuzzy Sugeno MethodObjective: TEPGED229The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DC ConvertersHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersHybrid SystemsTEMAPE321, TEMAPS835Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DC ConvertersHybrid Systems	TEPGPE295	Objective: The main objective of this		
microgrid, utilizing an Improved Seeker Optimization Algorithm (ISOA).DCDual FuzzyTEMAPE326, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DC ConvertersDual Fuzzy SugenoObjective: reprict is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.Objective: DCNethodTEPGPE288, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC Hybrid SystemsHybrid SystemsObjective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid Systems		project is to develop a voltage feed-forward		
Optimization Algorithm (ISOA).Image: Construct and the construction of the constr		control system for a photovoltaic-battery DC		
TEMAPE326, TEPGPE293, TEPGED229A Boost-LC Resonance Multimode DC- DCDC-DC Converter for EV Charger ApplicationDC-DC ConvertersDual Fuzzy Sugeno MethodObjective: rarge while overcoming the limitations of converters.Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of converters.DC-DCDual Fuzzy Sugeno MethodTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybrid SystemsObjective: Temaps835Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid		microgrid, utilizing an Improved Seeker		
TEMAED235, TEPGPE293, TEPGED229DC Converter for EV Charger ApplicationConvertersSugeno MethodObjective: objective: range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.ConvertersSugeno MethodTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS335A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DC ConvertersHybrid SystemsObjective: TemapssionThe main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DC LC ConvertersHybrid Systems		Optimization Algorithm (ISOA).		
TEPGPE293, TEPGED229Converter for EV Charger ApplicationMethodObjective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.MethodTEPGPE288, TEPGPE288, TEPGPE288, TEPGPS826, TEMAPE321,A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridTEPGPS826, TEMAPS835Objective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windLatenteLatente	ТЕМАРЕЗ26,	A Boost-LC Resonance Multimode DC-	DC-DC	Dual Fuzzy
TEPGED229Objective: The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Derective: The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEMAED235,	DC	Converters	Sugeno
Objective:The main objective of this project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.Image: Converter of this project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybridTEPGP5826, project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEPGPE293,	Converter for EV Charger Application		Method
project is to achieve high efficiency, high voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridObjective: project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid	TEPGED229			
voltage gain, and a wide output voltage range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridObjective: project is to propose a maximum power point tracking (MPPT) technique for a windDC-DLHybrid		•		
range while overcoming the limitations of conventional full-bridge (FB) LLC resonant converters.Image while overcoming the limitations of conventional full-bridge (FB) LLC resonant convertersTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Technique for a Wind Power System Based on the Trapezoidal RuleDC-DCHybrid SystemsConvertersSystemsObjective:The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windImage Wind Wind Wind Wind Wind Wind Wind Wind				
conventional full-bridge (FB) LLC resonant converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Based on the Trapezoidal RuleDC-DCHybridObjective: project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid				
converters.converters.DC-DCHybridTEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835Technique for a Wind Power System Based on the Trapezoidal RuleDC-DCSystemsObjective:The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windLandLand				
TEPGPE288, TEMAPE321, TEPGPS826, TEMAPS835A Maximum Power Point Tracking Objective for a Wind Power SystemDC-DCHybrid SystemsTEPGPS826, TEMAPS835Based on the Trapezoidal RuleConvertersSystemsObjective: project is to propose a maximum power point tracking (MPPT) technique for a windDC-DCHybrid		conventional full-bridge (FB) LLC resonant		
TEMAPE321, TEPGPS826, TEMAPS835Technique for a Wind Power System Based on the Trapezoidal RuleConvertersSystemsObjective:The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a windImage: ConvertersSystems				
TEPGPS826, TEMAPS835Based on the Trapezoidal RuleObjective:The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a wind		5		-
TEMAPS835       Objective: The main objective of this         project is to propose a maximum power         point tracking (MPPT) technique for a wind		-	Converters	Systems
<b>Objective:</b> The main objective of this project is to propose a maximum power point tracking (MPPT) technique for a wind		Based on the Trapezoidal Rule		
project is to propose a maximum power point tracking (MPPT) technique for a wind	TEMAPS835			
point tracking (MPPT) technique for a wind		<b>Objective:</b> The main objective of this		
		project is to propose a maximum power		
power system based on the Trapezoidal		point tracking (MPPT) technique for a wind		
Poner System custa on the Happerstan		power system based on the Trapezoidal		
Rule is to enhance the efficiency and				



	output of the wind turbine system		
TEMAPS795,	Enhancement of Solar PV Efficiency	DC-DC	Fixed Power
TEPGPS794,	Using Double Integral Sliding Mode	Converters	Point
TEMAPE296,	MPPT Control		Tracking
TEPGCS89,			
TEMAPE221,			
TEPGPE193,	Objective: The main objective of this		
TEPGPE194	project is to enhance the efficiency of Solar		
	Photovoltaic (PV) Panels through the		
	implementation of a Double Integral Sliding		
	Mode Maximum Power Point Tracking		
TEMAPS825,	(MPPT) Control Strategy. Multifunctional Onboard Charger for	DC-DC	GAO
TEPGPS816,	Electric Vehicles Integrating a Low-	Converters	optimized
TEMAPE314,	Voltage DC-DC Converter and Solar	Converters	SMC
TEMAPE315,	Roof		5000
TEPGPE281,			
TEPGPE282,			
TEMAED220,	<b>Objective:</b> The main objective of this		
TEPGED214	project is to propose a multifunctional on-		
	board charger for electric vehicles		
	integrating a low-voltage DC-DC converter		
	and solar roof.		
TEMAPS826,	Cascaded Interleaved DC-DC Converter	DC-DC	STSMC
TEPGPS817,	for a Bidirectional Electric Vehicle	Converters	
TEMAPE317,	Charging Station		
TEPGPE284,			
TEMAED222,	<b>Objective:</b> The main objective of this		
TEPGED216	project is to propose a cascaded interleaved		
	DC-DC converter for a bidirectional Electric		
	Vehicle charging station to reduce current		
	and voltage stress on the semi-conductors and passive elements.		
TEMAPS796,	Design and Analysis of Novel High-Gain	DC-DC	ISOA
TEMAPE298,	Boost Converter for Renewable Energy	Converters	150A
TEPGPS795,	Systems (RES)	30117010013	
TEPGPE270			
TEPGPE270			



TEMAPE316, TEPGPE283, TEMAED221, TEPGED215	<ul> <li><b>Objective:</b> The main objective of this project is to create and evaluate a high-gain boost converter customized for RES prioritizing efficiency and performance optimization for sustainable energy applications.</li> <li><b>New Integrated DC-DC Conversion System for Electric Vehicles</b></li> <li><b>Objective:</b> The main objective of this project is to propose a new integrated DC-DC conversion system for Electric Vehicles to reduce the components as well as power losses.</li> </ul>	DC-DC Converters	New Sliding Mode Reaching Law
TEMAPE363, TEPGPE330, TEMAED256, TEPGED250	A Bidirectional Bridgeless Converter- Based Electric Vehicle Charger Objective: The main objective of this project is to propose a new integrated DC- DC conversion system for Electric Vehicles to reduce the components as well as power losses.	AC-DC Converters	ST-SMC
TEMAPE361, TEPGPE328, TEMAED255, TEPGED249	ElectricVehicleOn-BoardFastCharging Through Converter MaximumSwitch UtilizationObjective:The primary objective of thispaper is to propose a new on-board fastcharging topology for electric vehicles(EVs) that maximizes the utilization ofconverter switch capacity. The aim is toachieve faster charging, reduce stress oncomponents, and maintain high efficiencywith a compact design.	AC-DC Converters	ST-SMC
TEMAPS882, TEPGPS872,	Enhancing Zero Voltage Ride Through of PMSG-Based Wind Generator With	AC-DC Converters	STSMC



TEMAED244, TEPGED238, TEMAPE343, TEPGPE310	Interchange of Converter Control and Optimized Supercapacitor Energy Storage System Objective: The main objective of this project is to improve the reliability and stability of wind energy systems during grid disturbances. This is achieved by optimizing the control strategy of the converter and incorporating a super-capacitor-based energy storage system.		
TEMAPS875,	An Ingenious Technique to Track the	AC-DC	ANN based
ТЕМАРЕЗЗ9,	Maximum Power Point for a Wind	Converters	SMC
TEPGPS865,	Energy System		
TEPGPE306			
	<b>Objective:</b> The main objective of this		
	project is to develop an advanced Maximum		
	Power Point Tracking (MPPT) technique for		
	Wind Energy Conversion Systems (WECS).		
	The goal is to maximize the extraction of power from wind energy systems by		
	improving the efficiency and reducing		
	oscillations around the MPP.		
ТЕМАРЕЗ20,	Sliding Mode Control of Vienna	AC-DC	Genetic
TEPGPE287,	Rectifier Under Unbalanced Weak	Converters	Algorithm
TEMACS101,	Power Grid		
TEPGCS95			
	<b>Objective:</b> The main objective of this		
	project is to control the Vienne Rectifier by		
	using Sliding Mode Controller under		
	unbalanced weak power grid.		- 15
TEMAPE318,	Coordinated Control Strategy for	AC-DC	Dual Fuzzy
TEPGPE285,	Cascaded	Converters	Sugeno
TEMAED223,	Current-Source Converter Under		based controller
TEPGED217	Unbalanced Grid Voltage		controller
	<b>Objective:</b> The main objective of this		
	project is to ensure stable and efficient		
	project is to ensure stable and efficient		



	operation by mitigating the effects of		
	voltage unbalance, maintaining power		
	quality and enhancing system reliability.		
TEMAPS798,	Mitigating Uncertainty Problems of	AC-DC	STSMC
TEMAPS799,	Renewable Energy Resources Through	Converters	515140
TEMAPS800,	Efficient Integration of Hybrid Solar	converters	
TEPGPS797,	PV/Wind Systems Into Power		
	Networks		
TEPGPS798,	Networks		
TEPGPS799,			
TEMAPE300,			
TEMAPE301,	Objective: The main objective of this		
TEPGPE272,	project is to mitigate the problems of		
TEPGPE273	renewable energy resources through		
	efficient integration of Hybrid Solar		
	PV/Wind systems into power networks.		
TEMAED219,	An LLC-Based Single-Stage Step-Up	AC-DC	STSMC
ТЕМАРЕЗ13,	AC/DC	Converters	
TEPGED213,	Resonant Converter Without Boost		
TEPGPE280	Circuit for EV Charging With High		
	Power Factor		
	<b>Objective:</b> The main objective of this		
	project is to develop a highly efficient, cost-		
	effective and simplified power conversion		
	solution that integrates power factor		
	correction (PFC) and DC-DC Conversion		
	into a single stage specifically designed for		
	EV charging related applications.		
TEMAPS825,	Multifunctional Onboard Charger for	AC-DC	GAO
TEPGPS816,	Electric Vehicles Integrating a Low-	Converters	optimized
TEMAPE314,	Voltage DC-DC Converter and Solar		SMC
TEMAPE315,	Roof		
TEPGPE281,			
TEPGPE282,			
TEMAED220,	<b>Objective:</b> The main objective of this		
TEPGED214	project is to propose a multifunctional on-		
	board charger for electric vehicles		
	integrating a low-voltage DC-DC converter		
	and solar roof.		



TEMAPS838,	Grid-Forming Voltage-Source Inverter	AC-DC	Dual Fuzzy
TEMAPS839,	for	Converters	Sugeno
TEPGPS829,	Hybrid Wind-Solar Systems Interfacing		Controller
TEPGPS830,	Weak Grids		
TEMAPE322,			
TEPGPE289	Objective: The main objective of this		
	project is to propose a grid forming voltage		
	source inverter for hybrid wind-solar		
	systems interfacing weak grids.		
TEMAPS911,	Energy Management Algorithm Of	DC-AC	ISOA
TEPGPS901,	Hybrid DC Microgrid Using MPC	Converters	
TEMACS879,	Approach		
TEPGCS125			
	<b>Objective:</b> The main objective of the project		
	is to develop an advanced energy		
	management system leveraging the Model		
	Predictive Control (MPC) technique. This		
	system aims to optimize power flow,		
	balance supply and demand among		
	renewable sources, storage systems, and loads, enhance system efficiency, ensure		
	reliable operation, and adapt to dynamic		
	conditions in a hybrid DC microgrid.		
TEMAPS908,	Fully Decoupled Active and Reactive	DC-AC	Dual Phase
TEPGPS898,		Converters	Shift based
TEMAPE360,	Power		PWM
TEPGPE327	Distribution Control for Single Phase		
	Cascaded Connected Microinverter		
	Under Island Mode		
	Objective: The main objective of this		
	project is to develop a fully decoupled		
	control strategy for active and reactive		
	power distribution in a single-phase		
	cascaded microinverter operating in island mode.		
TEMAPS900,	Evaluation and Control of a Solar Power	DC-AC	PSO MPPT
TEPGPS890,	System Connected with an Electrical Grid	Converters	



ТЕМАРЕЗ56,			
TEPGPE323	<b>Objective:</b> The main objective of the project		
	is to evaluate and control a solar power		
	system connected to an electrical grid using		
	the Incremental Conductance (INC) MPPT		
	technique to optimize energy transfer and		
	improve system performance.		
TEMAPS896,	Energy Management in Multi-Source	DC-AC	CSA
TEPGPS886,	Power	Converters	
TEMAPE354,	System Based on PV /Wind /Batteries /		
TEPGPE321	Diesel		
	Generator Connected with The Grid		
	Objectives The main objective of the		
	<b>Objective:</b> The main objective of this project is to achieve optimized energy		
	allocation within a multi-source power		
	system that integrates photovoltaic (PV)		
	panels, wind turbines, batteries, diesel		
	generators, and grid connectivity to manage		
	and distribute energy efficiently based on		
	real-time availability and demand		
TEMAPS897,	Analysis of Power Coordination Control	DC-AC	Optimized PI
TEMAPE355,	Strategy in Island Mode of Photovoltaic	Converters	
TEPGPS887, TEPGPE322	Energy Storage Combined System		
	<b>Objective:</b> The main objective of this		
	project is to design and analysis of power		
	co-ordination control Strategy in Islanded		
	Mode of photovoltaic & energy storage		
	combined system.		
TEMAPS894,	Hybrid Energy System Simulation and	DC-AC	Trapezoidal
TEPGPS884,	Modelling Incorporating Wind and Solar	Converters	MPPT
ТЕМАРЕЗ53,	Power		
TEPGPE320			
	Objective: The main objective of this paper		



TEMAPE352,	<ul> <li>is to model and simulate a hybrid energy system that combines wind and solar power, aiming to assess its performance, improve energy reliability, and support the integration of renewable sources for sustainable energy production</li> <li>Analysis and Improvement of Transient</li> </ul>	DC-AC	ANN
TEPGEP319, TEMACS876, TEPGCS122	Voltage Stability for Grid-Forming Converters	Converters	Controller
	<b>Objective</b> : The main objective of this project is to analyze and improve the transient voltage stability of grid-forming converters (GFCs) in power systems.		
TEMAPS893, TEMACS875, TEMAPE351, TEPGPS883, TEPGCS121, TEPGPE318	A Fast-response Power-Flow Control Strategy of MMC-UPFC based on Active Disturbance Rejection Control	DC-AC Converters	STSMC
	<b>Objective:</b> The primary objective of this paper is to develop a rapid power flow control strategy for the Modular Multilevel Converter-Unified Power Flow Controller (MMC-UPFC) using Active Disturbance Rejection Control (ADRC).		
TEMAED250, TEPGED244, TEMAED251, TEPGED245, TEMAPE349, TEPGPE316	High Power Density EV Integrated FastBattery Chargers Based on the GeneralTorque Cancelation Law for Three-phase MotorsObjective: The primary goal of this projectis to develop a general torque cancellationlaw for three-phase motors. Thisadvancement aims to improve motor	DC-AC Converters	ISOA



TEMAED249, TEPGED243, TEMAPE348, TEPGPE315	efficiency, thereby enabling the creation of high-power density, integrated fast battery chargers for electric vehicles (EVs). <b>Robust Model-Free Fault-Tolerant</b> <b>Predictive</b> <b>Control for PMSM Drive System</b>	DC-AC Converters	New Sliding Mode Reaching law
	<b>Objective:</b> This main objective of this project is a model-free fault-tolerant predictive control (MFFTPC) method for surface-mounted permanent magnet synchronous motor (SPMSM) drives. The method will use an extended sliding mode observer (ESMO) to manage uncertainties and unknown disturbances. The goal is to enhance the performance of finite-control- set model predictive control.		
TEMAED248, TEMAPE347, TEMACS870, TEPGED242, TEPGPE314, TEPGCS116	Speed and Position Estimation for 5-phPMSM Using SOGI Based on SMOConsidering Short-Circuit FaultObjective: The main objective of thisproject is to mitigate harmonics andaccurately estimate rotor speed and positionduring short-circuit faults.	DC-AC Converters	Dual Fuzzy Sugeno Controller
TEMAPE346, TEPGPE313, TEMAED246, TEPGED240, TEMACS868, TEPGCS114	Torque Ripple Suppression of BLDCMWithOptimal Duty Cycle and Switch Stateby FCS-MPCObjective: The main objective of the projectis to suppress torque ripples in Brushless DC(BLDC) motors by implementing a Finite	DC-AC Converters	Optimized PI



	Control Set Model Predictive Control (FCS-		
	MPC) scheme. This approach aims to		
	enhance motor performance by minimizing		
	torque fluctuations, thereby improving		
	efficiency		
TEMAPE345,	Development and Control of PMSM	DC-AC	Dual Fuzzy
TEPGPE312,	Drive with Improved Performance Over	Converters	Sugeno
TEMAED245,	Wide Speed and Load Ranges		Controller
TEPGED239			
	Objective: The main objective of this		
	project is to develop and control a PMSM		
	drive for superior performance across wide		
	speed and load ranges. This involves		
	optimizing control strategies for stable		
	operation, enhancing efficiency under		
	varying loads, and improving dynamic		
	performance by minimizing torque ripple,		
	reducing current harmonics, and ensuring		
	precise, responsive control.		
TEMAPS883,	An Adaptive Fuzzy Controller-Based	DC-AC	ANN based
TEPGPS873,	Distributed Voltage Control Strategy	Converters	MPPT
TEMACS866,	for a Remote Microgrid System With		
TEPGCS112,	Solar Energy and Battery Support		
TEMAPE344,			
TEPGPE311	Objective: The main objective of this		
	project is to propose an adaptive fuzzy		
	controller-based distributed voltage control		
	strategy for a remote microgrid system with		
	solar energy and battery support.		
TEMAPS881,	Hybrid Compensation Based Efficient	DC-AC	FPPT
TEMAPE342,	Wireless Charging System Design with	Converters	
TEMAED243,	Solar Photovoltaic Interface Toward		
TEPGPS871,	Sustainable Transportation		
TEPGPE309,			
TEPGED237,	Objective: The main objective of this		



	project, is to design an efficient wireless charging system integrated with a solar photovoltaic interface to support sustainable transportation. The focus is on improving energy transfer efficiency and ensuring reliable power delivery to electric vehicles (EVs) using renewable energy sources.		
TEMACS863, TEMAPE340, TEPGCS109, TEPGPE307	Adaptive Control for Improved Virtual Synchronous GeneratorUnder Under Imbalanced Grid VoltageObjective:The main objective of this project is to develop an adaptive control strategy for a Virtual Synchronous Generator (VSG) that enhances performance and stability under imbalanced grid voltage conditions.	DC-AC Converters	STSMC
TEMAPS864, TEMACS856, TEPGPS854, TEPGCS102, TEMAPE331, TEMAPE332, TEPGPE298, TEPGPE299	Circle Search Algorithm-Based Super Twisting Sliding Mode Control for MPPT of Different Commercial PV Modules The main objective of this project is to implement a circle search algorithm based super twisting sliding mode control for MPPT of different commercial PV modules.	DC-AC Converters	Genetic Algorithm
TEPGED224, TEPGPE290, TEMAED230, TEMAPE323	Hybrid Control Method of Full-BridgeLLC Resonant Converter Based onElectric VehicleObjective: The main objective of thisproject is to optimizing its performance for	DC-AC Converters	Optimized PI



TEMACS859, TEPGCS105, TEMAPE335, TEPGPE302	electric vehicle applications by enhancing efficiency and stability. This involves integrating advanced control techniques to improve power conversion and reliability. Grid-Connected Converter with Grid- Forming and Grid-Following Modes Presenting Symmetrical and Asymmetrical Fault Ride-Through Capability	DC-AC Converters	Dual Phase Shift based PWM
	<b>Objective:</b> The main objective of this project is to propose a grid-connected converter with grid-forming and grid following modes presenting symmetrical and asymmetrical fault ride-through capability.		
TEMAPS862,	Improving Active Resonance Damping	DC-AC	Optimized PI
TEPGPS852, TEMAPE330,	and	Converters	
TEPGPE297,	Unbalanced Voltage Mitigation Based on		
TEMAPS863,	<b>Combined DDSRF and Washout Filter</b>		
TEPGPS853	in Islanded Microgrids		
	<b>Objective:</b> The main objective of this project is to develop and implement a combined approach using Double Decoupled Synchronous Reference Frame (DDSRF) and Washout Filter techniques to enhance active resonance damping and mitigate unbalanced voltage conditions in islanded microgrids. This combined approach aims to improve the stability, reliability, and power quality of islanded microgrids, ensuring efficient and continuous operation under varying load and generation conditions.		
TEMACS104,	Predictive Control of PMSG-Based	DC-AC	ANN based



TEPGCS98, TEMAPE324, TEPGPE291, TEMAPS843, TEPGPS834	Hydro-Electric System with Battery Supported UPQCObjective: The main objective of this project is to propose a predictive control to achieve efficient, stable, and high-quality power generation and distribution from the PMSG-based hydro-electric system, supplemented by the battery-supported UPQC	Converters	SMC
TEMAPS798, TEMAPS799, TEMAPS800, TEPGPS797, TEPGPS798, TEPGPS799, TEMAPE300, TEMAPE301, TEPGPE272, TEPGPE273	Mitigating Uncertainty Problems of Renewable Energy Resources Through Efficient Integration of Hybrid Solar PV/Wind Systems Into Power NetworksObjective:The main objective of this project is to mitigate the problems of renewable energy resources through efficient integration of Hybrid Solar PV/Wind systems into power networks.	DC-AC Converters	STSMC
TEMAPE364, TEPGPE331, TEMAPS912, TEPGPS902, TEMAPS913, TEPGPS903	AnImprovedMulticarrierPWMTechniqueforHarmonicReductioninCascadedH-BridgeBasedSolarPhotovoltaicSystemObjective:Themainobjectiveofthisprojectistodevelopanimprovedmulticarrierpulse-widthmodulation(PWM)techniqueforharmonicreductioninacascadedH-bridge-basedsolarphotovoltaic(PV)system.Theproposedtechniqueaimstominimizetotalharmonicdistortion(THD)intheoutputvoltage,enhancingpowerqualityandsystemefficiencysystemefficiencysystemficiencyficiency	Multilevel Inverters	ISOA
TEMAPS878, TEPGPS868,	Two-StageThree-PhaseTransformerlessHybridMultilevel	Multilevel Inverters	Adaptive Fuzzy and P



TEMAPE341,	Inverter for Solar PV Application		& 0
TEPGPE308			
	<b>Objective:</b> The main objective of this		
	project, is to develop an efficient, high-		
	performance inverter system that converts		
	the direct current (DC) from solar		
	photovoltaic (PV) panels into alternating		
	current (AC) suitable for grid integration or		
	load supply.		-
TEMAPS872,	A Capacitor Voltage Balancing Hybrid	Multilevel	Dual Fuzzy
TEMAPE337,	PWM	Inverters	Sugeno
TEPGPS862,	Technique to Improve the		Controller
TEPGPE304	Performance		
	of T-Type NPC Inverters		
	<b>Objective:</b> The main objective of this		
	project is to improve the performance of T-		
	Type NPC Inverters by using a capacitor		
	voltage balancing hybrid PWM technique.		00.4
TEMAPS868,	Modulated Predictive Current Control	Multilevel	CSA
TEMAPE334,	of	Inverters	
TEMACS858,	Photovoltaic Central NPC Inverter With		
TEPGPS858,	Reduced Computational Burden		
TEPGPE301,			
TEPGCS104	<b>Objective:</b> The main objective of this		
	project is to develop and implement a		
	modulated predictive current control		
	strategy for a photovoltaic central NPC		
	inverter, to enhance performance while		
	minimizing computational demands.		
TEMAPS874,	An Unbalance and Power Controller	Multilevel	New Sliding
TEPGPS864,	Allowing Smooth Islanded Transitions	Inverters	Mode
ТЕМАРЕЗЗ8,	in Three-Phase Microgrids		Reaching
TEPGPE305			Law
	<b>Objective</b> : The main objective of this		
	project is to develop a power controller for		
	seamless islanded transitions in three-phase		
	microgrids, ensuring stable voltage and		



	frequency during grid-to-island mode shifts.		
TEMAPS867, TEPGPS857, TEMAPE333, TEPGPE300	Single-Phase 15-Level Switched- Capacitor Boost Multilevel Inverter Topology for Renewable Energy Applications	Multilevel Inverters	Closed Loop PI
	<b>Objective:</b> The main objective of this project is to provide a high-efficiency, low- cost inverter that can boost and convert DC power from renewable sources into high- quality AC power, while reducing the number of power electronic components and achieving better voltage regulation and harmonic performance.		
TEMAPS846, TEPGPS837, TEMAPE325, TEPGPE292, TEMAED234,	A New Multilevel Inverter with Reduced Component Count for a Standalone Solar Energy Conversion System	Multilevel Inverters	Dual Phase Shift based PWM
TEPGED228	<b>Objective</b> : The main objective of this project is to propose a new multilevel inverter with reduced component count for a standalone solar energy conversion system- based application.		
TEMAPS807, TEPGPS807, TEMAPE304, TEPGPE276, TEMACS98, TEPGCS92	Designing of a PSO-Based Adaptive SMC With a Multilevel Inverter for MPPT of PV Systems Under Rapidly Changing Weather Conditions	Multilevel Inverters	Genetic Algorithm
	<b>Objective:</b> The main objective of this project is to design a PSO-based Adaptive SMC with a Multilevel Inverter for MPPT of PV Systems Under Rapidly Changing Weather Conditions to enhance the		



	overall efficiency and stability of the PV system.		
TEMAPS801, TEPGPS800, TEMAPE302, TEPGPE274	Design of an Extendable High Boost Multi-Port Z-Network Converter for Small Power Grid-Connected PV Applications	Multilevel Inverters	ISOA
	<b>Objective</b> : The main objective of this project is to propose an extendable high boost Multi-port Z-Network converter for implementing in Grid Connected PV Applications.		



			EXTENSIION
S.NO	TITLE	DOMAIN	TOPIC
TEMAED250,	High Power Density EV Integrated Fast	AC Drives	ISOA
TEPGED244,	Battery Chargers Based on the General		
TEMAED251,	Torque Cancelation Law for Three-		
TEPGED245,	phase Motors		
TEMAPE349, TEPGPE316	<b>Objective:</b> The primary goal of this project is		
	to develop a general torque cancellation law		
	for three-phase motors. This advancement		
	aims to improve motor efficiency, thereby		
	enabling the creation of high-power density,		
	integrated fast battery chargers for electric		
	vehicles (EVs).		
TEMAED249,	Robust Model-Free Fault-Tolerant	AC Drives	New Sliding
TEPGED243,	Predictive		Mode
ТЕМАРЕЗ48,	Control for PMSM Drive System		Reaching law
TEPGPE315			
	<b>Objective:</b> This main objective of this		
	project is a model-free fault-tolerant		
	predictive control (MFFTPC) method for		
	surface-mounted permanent magnet		
	synchronous motor (SPMSM) drives. The		
	method will use an extended sliding mode		
	observer (ESMO) to manage uncertainties		
	and unknown disturbances. The goal is to		
	enhance the performance of finite-control-set		
	-		
	model predictive control.		
TEMAED248,	Speed and Position Estimation for 5-ph	AC Drives	Dual Fuzzy
TEMAPE347,	PMSM Using SOGI Based on SMO		Sugeno



TEMACS870,	Considering Short-Circuit Fault		Controller
TEPGED242,			
TEPGPE314,	<b>Objective:</b> The main objective of this project		
TEPGCS116	is to mitigate harmonics and accurately		
	estimate rotor speed and position during		
	short-circuit faults.		
TEMACS869,	Speed Regulation of PMSM Systems	AC Drives	Model
TEPGCS115,	Based		Predictive
TEMAED247,	on a New Sliding Mode Reaching Law		Controller
TEPGED241			
	<b>Objective</b> : The objective of the project is to		
	develop a novel sliding mode reaching law to		
	enhance the speed regulation of Permanent		
	Magnet Synchronous Motor (PMSM)		
	systems. This approach aims to improve		
	robustness and accuracy in speed control by		
	mitigating the effects of disturbances and		
	parameter variations.		
TEMAPE346,	Torque Ripple Suppression of BLDCM	AC Drives	Optimized PI
TEPGPE313,	With		
TEMAED246,	Optimal Duty Cycle and Switch State		
TEPGED240,	by FCS-MPC		
TEMACS868,			
TEPGCS114	Objective: The main objective of the project		
	is to suppress torque ripples in Brushless DC		
	(BLDC) motors by implementing a Finite		
	Control Set Model Predictive Control (FCS-		
	MPC) scheme. This approach aims to		
	enhance motor performance by minimizing		
	torque fluctuations, thereby improving		
	efficiency		
TEMAPE345,	Development and Control of PMSM Drive	AC Drives	Dual Fuzzy
TEPGPE312,	with Improved Performance Over Wide		Sugeno
TEMAED245,	Speed and Load Ranges		Controller
TEPGED239			
	<b>Objective</b> : The main objective of this project		
	is to develop and control a PMSM drive for		
	superior performance across wide speed and		
	load ranges. This involves optimizing control		



	strategies for stable operation, enhancing		
	efficiency under varying loads, and		
	improving dynamic performance by		
	minimizing torque ripple, reducing current		
	harmonics, and ensuring precise, responsive		
	control.		
TEMAPS882,	Enhancing Zero Voltage Ride Through of	AC Drives	STSMC
TEPGPS872,	PMSG-Based Wind Generator With		
TEMAED244,	Interchange of Converter Control		
TEPGED238,	and Optimized Supercapacitor		
ТЕМАРЕЗ43,	Energy Storage System		
TEPGPE310			
	<b>Objective:</b> The main objective of this		
	project is to improve the reliability and		
	stability of wind energy systems during grid		
	disturbances. This is achieved by optimizing		
	the control strategy of the converter and		
	incorporating a super-capacitor-based energy		
	storage system.		
TEMAPS879,	Generalized DSC-FDC-PLL	AC Drives	ISOA
TEPGPS869,	Based Synchronization of PV Array-BES		
TEMACS864,	Fed Water Pump System With Utility		
TEPGCS110,	Grid		
TEMAED242,			
TEPGED236	<b>Objective</b> : The Main objective of this project		
	is to develop and implement a generalized		
	delayed signal cancellation (GDSC)-based		
	phase-locked loop (PLL) for synchronizing a		
	photovoltaic (PV) array and battery-supported		
	water pump system with the utility grid,		
	ensuring efficient power management in both		
	grid-connected and islanded modes.		
TEMAPS876,	Passive Control for Brushless Doubly-	AC Drives	Closed Loop
TEPGPS866,	Fed		VSC
TEMAED241,	Reluctance Generator Under		
TEPGED235	Unbalanced Grid Voltages		
	5		
	<b>Objective:</b> The main objective of this project		



	is to develop a passive control strategy for Brushless Doubly-Fed Reluctance Generators		
	(BDFRGs) that effectively mitigates the		
	adverse effects of unbalanced grid voltages.		
TEMAPS836,	Experimental Validation of Feedback PI	AC Drives	STSMC
TEPGPS827,	Controllers for Multi-Rotor Wind		
TEMAED228, TEPGED222	Energy Conversion Systems		
TEI GED222	Conversion Systems		
	<b>Objective:</b> The main objective of this project		
	is to access the performance and stability		
	analysis of the controllers in real-world		
	conditions and evaluating their ability to		
	maintain optimal rotor speeds and maximize		
	energy conversion efficiency under varying		
TEMAPS846,	wind conditions. A New Multilevel Inverter with Reduced	AC Drives	Dual Phase
TEPGPS837,	Component Count for a Standalone	AC DIIVES	Shift based
TEMAPE325,	Solar Energy Conversion System		PWM
TEPGPE292,			
TEMAED234,	Objective: The main objective of this project		
TEPGED228	is to propose a new multilevel inverter with		
	reduced component count for a standalone		
	solar energy conversion system-based		
	application.		
TEMAPS830,	Stability Analysis and Enhanced Virtual	AC Drives	Predictive
TEPGPS821,	Synchronous Control for Brushless		Control
TEMAED225,	<b>Doubly-fed Induction Generator Based</b>		
TEPGED219	Wind Turbines		
	Objective: The main objective of this project		
	<b>Objective:</b> The main objective of this project is to analyze the stability and propose the		
	virtual synchronous control for Brushless		
	Doubly-fed Induction Generator Based Wind		



	Turbines.		
TEMAPS813,	Modelling and Coordinated Control of	AC Drives	STSMC
TEMAPS814,	Grid		
TEPGPS818,	Connected Photovoltaic, Wind Turbine		
TEMAPS808,	Driven PMSG, and Energy Storage		
TEMAPS809,	Device for a Hybrid DC/AC Microgrid		
TEMAPS810,			
TEPGPS808,			
TEPGPS809,	<b>Objective:</b> The main objective of this		
TEPGPS810,	project is to optimize the performance and		
TEMAED218,	integration of grid-connected photovoltaic		
TEPGED212	systems, wind-turbine driven PMSGs and		
	energy storage devices within a hybrid dc-		
	ac microgrid through advanced modelling		
	and coordinated control strategies.		
TEMAPS844,	Coordinated Control of Grid-Connected	AC DRIVES	Ingenious
TEMAPS845,	PMSG Based Wind Energy System with		MPPT
TEPGPS835,	STATCOM and Supercapacitor Energy		
TEPGPS836,	Storage		
TEMAED233,			
TEPGED227	<b>Objective:</b> The main objective of this project		
	is to propose a coordinated control of grid		
	connected PMSG based wind energy system		
	with STATCOM and supercapacitor energy		
	storage systems.		
TEPGED210,	Performance Analysis of a High Gain	DC DRIVES	ANN
TEMAED216,	Bidirectional DC-DC Converter Fed		
TEPGED209,	Drive for an Electric Vehicle With		
TEMAED215	Battery Charging Capability		
	During Braking		
	<b>Objective:</b> The main objective of this		
	project to implement a high gain		
	bidirectional DC-DC Converter Fed Drive		
	for an Electric Vehicle With Battery		
	Charging Capability During Braking		
L	Shar Bring Supushity During Druking		



ТЕМАРЕЗ63,	A Bidirectional Bridgeless Converter-	Electric	ST-SMC
TEPGPE330,	Based Electric Vehicle Charger	Vehicles	
TEMAED256,			
TEPGED250	<b>Objective:</b> The main objective of this		
	project is to propose a new integrated DC-		
	DC conversion system for Electric Vehicles		
	to reduce the components as well as power		
	losses.		
ТЕМАРЕЗ61,	Electric Vehicle On-Board Fast Charging	Electric	ST-SMC
TEPGPE328,	Through Converter Maximum Switch	Vehicles	
TEMAED255,	Utilization		
TEPGED249			
	<b>Objective:</b> The primary objective of this		
	paper is to propose a new on-board fast		
	charging topology for electric vehicles		
	(EVs) that maximizes the utilization of		
	converter switch capacity. The aim is to		
	achieve faster charging, reduce stress on		
	components, and maintain high efficiency		
	with a compact design.		
TEMAPS802,	Efficient Bidirectional Wireless Power	Electric	PSO Based
TEMAED217,	Transfer System Control Using Dual	Vehicles	SMC
TEPGPS801,	Phase Shift PWM Technique for Electric		
TEPGED211	Vehicle Applications		
	<b>Objective:</b> The main objective of this project		
	is to optimize charging efficiency and enable		
	power from G2V and V2G by using		
	bidirectional wireless power transfer system.		
	It focuses on dynamic efficiency adjustments		
	and seamless integration with EV and smart		
	grid infrastructures.	Floctric	ICOA
TEMAED250,	High Power Density EV Integrated Fast	Electric	ISOA
TEPGED244, TEMAED251,	Battery Chargers Based on the General	Vehicles	
,	Torque Cancelation Law for Three-		
TEPGED245, TEMAPE349,	phase Motors		
TEPGPE316	<b>Objective:</b> The primary goal of this project is		
1 LT UF LS 10	objective. The primary goar of this project is		



	to develop a general torque cancellation law		
	for three-phase motors. This advancement		
	aims to improve motor efficiency, thereby		
	enabling the creation of high-power density,		
	integrated fast battery chargers for electric		
	vehicles (EVs).		
TEMAPS881,	Hybrid Compensation Based Efficient	Electric	FPPT
ТЕМАРЕЗ42,	Wireless Charging System Design with	Vehicles	
TEMAED243,	Solar Photovoltaic Interface Toward		
TEPGPS871,	Sustainable Transportation		
TEPGPE309,			
TEPGED237,	<b>Objective:</b> The main objective of this		
	project, is to design an efficient wireless		
	charging system integrated with a solar		
	photovoltaic interface to support sustainable		
	transportation. The focus is on improving		
	energy transfer efficiency and ensuring		
	reliable power delivery to electric vehicles		
	(EVs) using renewable energy sources.		
TEMAPS871,	GAO Optimized Sliding Mode Based	Electric	CSA Based
TEPGPS861,	Reconfigurable Step Size Pb&O MPPT	Vehicles	STSMC
TEMAED240,	Controller With Grid Integrated		
TEPGED234,	EV Charging Station		
TEMACS860,	0.0		
TEPGCS106	<b>Objective:</b> The main objective of this project		
	is to develop a GAO-optimized sliding mode-		
	based reconfigurable step size Pb&O MPPT		
	controller to maximize the efficiency of PV		
	systems. This system will seamlessly		
	integrate with grid-connected EV charging		
	stations, ensuring optimal energy utilization		
	and reliable 24/7 charging.		
TEMAPS858,	Conjugate-Gradient Based Control in a	Electric	STSMC
TEPGPS848,	Grid-Integrated PV With 24/7	Vehicles	
TEMAED238,	Distortion-Free Charging for		
TEPGED232	Bidirectional EV Charger		



	<b>Objective:</b> The main objective of this project is to optimize the power flow and enhance the efficiency of energy transfer between the grid, PV system, and EV charger. This approach aims to minimize harmonic distortions and ensure seamless charging and discharging of EV batteries, promoting reliable and sustainable energy management.		
TEMAPE327,	Multifunctional Integrated DC-DC	Electric	Optimized PI
TEMAED237, TEPGPE294,	Converter for Electric Vehicles	Vehicles	
TEPGED231	<b>Objective:</b> The main objective of this project		
	is to develop a single integrated DC-DC		
	converter that can perform multiple functions		
	(G2V, V2G, and LDC modes) efficiently,		
	reducing the number of components,		
	complexity, and overall cost, while improving		
	the performance and reliability of power		
	conversion in electric vehicles		
TEMAPS856,	A Single-Stage Bridgeless PFC Charger	Electric	GAO
TEPGPS846,	with	Vehicles	optimized
TEMAPS857,	Enhanced Power Quality for LEV		SMC
TEPGPS847,	Mounted Solar PV Panel		
TEMAED236,			
TEPGED230	<b>Objective:</b> The main objective of the project		
	is to design a single-stage bridgeless Power		
	Factor Correction (PFC) charger that		
	enhances power quality for solar photovoltaic		
	(PV) panels installed on light electric vehicles		
	(LEVs). This integrated approach optimizes		
ТЕМАРЕЗ26,	efficiency, minimizes power losses. A Boost-LC Resonance Multimode DC–	Electric	Dual Fuzzy
TEMAPE326, TEMAED235,	DC	Vehicles	Sugeno
TEPGPE293,	Converter for EV Charger Application	v enicies	Method
TEPGED229	converter for 24 ontriger reprication		nethou
	<b>Objective:</b> The main objective of this project		
	<b>Objective:</b> The main objective of this project is to achieve high efficiency, high voltage		



	overcoming the limitations of conventional		
	full-bridge (FB) LLC resonant converters.		
TEPGED224,	Hybrid Control Method of Full-Bridge	Electric	Optimized PI
TEPGPE290,	LLC Resonant Converter Based on	Vehicles	
TEMAED230,	Electric Vehicle		
TEMAPE323			
	<b>Objective:</b> The main objective of this project		
	is to optimizing its performance for electric		
	vehicle applications by enhancing efficiency		
	and stability. This involves integrating		
	advanced control techniques to improve		
	power conversion and reliability.		
TEMAPS831,	HESS management for Virtual Inertia,	Electric	Dual Phase
TEPGPS822,	Frequency and Voltage Support through	Vehicles	Shift based
TEMAED226,	Off-board EV Bidirectional Chargers		PWM
TEPGED220			
	<b>Objective:</b> The main objective of this project		
	is to enhance grid stability by dynamically		
	balancing power supply and demand,		
	providing rapid frequency response and		
	maintaining voltage levels.		
TEMAPS827,	Integrated Three-Port Converter for	Electric	Fixed Power
TEMAED224,	Solar-Charged Electric Vehicle	Vehicles	Point
TEPGPS818,	Applications		Tracking
TEPGED218			
	<b>Objective:</b> The main objective of this		
	project is to efficiently manage power flow		
	from solar panels to both a high-voltage		
	battery (HVB) and a low-voltage battery		
	(LVB). Optimizing the use of solar energy		
	even under partial shading conditions.	Floateria	STSMC
TEMAPS826,	Cascaded Interleaved DC-DC Converter for a Bidirectional Electric Vehicle	Electric Vehicles	51 SML
TEPGPS817,		venicies	
TEMAPE317,	Charging Station		
TEPGPE284, TEMAED222,	<b>Objective:</b> The main objective of this project		
TEPGED216	is to propose a cascaded interleaved DC-DC		
IEFGED210	converter for a bidirectional Electric Vehicle		



	charging station to reduce current and voltage stress on the semi-conductors and passive elements.		
ТЕМАРЕЗ18,	Coordinated Control Strategy for	Electric	Dual Fuzzy
TEPGPE285,	Cascaded	Vehicles	Sugeno
TEMAED223,	Current-Source Converter Under		based
TEPGED217	Unbalanced Grid Voltage		controller
	<b>Objective:</b> The main objective of this project is to ensure stable and efficient operation by mitigating the effects of voltage unbalance, maintaining power quality and enhancing system reliability.		
TEMAPS825,	Multifunctional Onboard Charger for	Electric	GAO
TEPGPS816,	Electric Vehicles Integrating a Low-	Vehicles	optimized
ТЕМАРЕЗ14,	Voltage DC-DC Converter and Solar Roof		SMC
TEMAPE315,			
TEPGPE281,			
TEPGPE282,	<b>Objective:</b> The main objective of this project		
TEMAED220,	is to propose a multifunctional on-board		
TEPGED214	charger for electric vehicles integrating a low-		
	voltage DC-DC converter and solar roof.	Electric	Now Cliding
TEMAPE316, TEPGPE283,	New Integrated DC–DC Conversion System for Electric Vehicles	Vehicles	New Sliding Mode
TEMAED221,	System for Electric venicles	Venicles	Reaching
TEPGED215	<b>Objective:</b> The main objective of this project		Law
	is to propose a new integrated DC-DC		
	conversion system for Electric Vehicles to		
	reduce the components as well as power		
	losses.		
TEMAED219,	An LLC-Based Single-Stage Step-Up	Electric	STSMC
ТЕМАРЕЗ13,	AC/DC	Vehicles	
TEPGED213,	Resonant Converter Without Boost		
TEPGPE280	Circuit for EV Charging With High Power Factor		
	<b>Objective:</b> The main objective of this project		



	is to develop a highly efficient, cost-effective		
	and simplified power conversion solution that		
	integrates power factor correction (PFC) and		
	DC-DC Conversion into a single stage		
	specifically designed for EV charging related		
	applications.		
TEPGED210,	Performance Analysis of a High Gain	Electric	ANN
TEMAED216,	Bidirectional DC-DC Converter Fed	Vehicles	
TEPGED209,	Drive for an Electric Vehicle With		
TEMAED215	Battery Charging Capability		
	During Braking		
	<b>Objective:</b> The main objective of this		
	project to implement a high gain		
	bidirectional DC-DC Converter Fed Drive		
	for an Electric Vehicle with Battery		
	Charging Capability During Braking		

PROJECT SUPPORTS FOR STUDENTS:

- PROJECT ABSTRACT
- ✤ PROJECT IEEE BASE PAPER/ REFERENCE PAPER
- ✤ PROJECT PRESENTATION IN PPT FORMAT
- ✤ PROJECT REVIEW ASSISTANCE FOR VIVA
- PROJECT DIAGRAMS
- ✤ PROJECT SOURCE CODE
- PROJECT REPORT
- ✤ PROJECT SCREEN SHOTS
- ✤ PROJECT DEMO
- ✤ PROJECT EXPLANATION
- ✤ PLAGARISM DOCUMENTATION
- ✤ INTERNATIONAL JOURNAL/CONFERENCE PUBLISHING
- ✤ PROJECT ACCEPTANCE LETTER
- ✤ PROJECT COMPLETION CERTIFICATE

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