Sri Krishna College of Engineering and Technology
(An Autonomous Institution)
Kuniamuthur, Coimbatore – 641 00
Department of Electrical and Electronics Engineering

Research and Development

Completed Funded Projects

S.No	Project Title	Funded Agency	Duration	Cost	Investigator and Co-Investigator Details
1.	Interfacing query module & Plant optimization model software	ABB	13.09.12	16,75,000/-	Dr. L. Siva Kumar
2.	Retainership Assignment	ABB	15.12.11 to 14.12.12	12,00,000/-	Dr. L. Siva Kumar
3.	Retainership Assignment	ABB	01.07.09 to 30.06.10	16,80,000/-	Dr. L. Siva Kumar
4.	Software for dynamic modelling of CFBC furnace (125/135MW)	BHEL Hyderabad	12.03.10	9,75,000/-	Dr. L. Siva Kumar
5.	Boiler model testing for SIPAT	ABB	30.10.08	7,50,000/-	Dr. L. Siva Kumar
6.	Boiler model testing	ABB	30.04.08	10,52,650/-	Dr. L. Siva Kumar

Publication Details

S.No	Title of the Paper	Authors	Name of the Journal	Volume and issue No.	Year
1.	Open-Circuit Fault Diagnosis in Back-to-Back Converters of PMSG Drives for Wind Turbine Systems	Dr. N. Manonmani	International Journal of Innovation Science and Research (IJISR)	Vol.5, No, 03, pp.688-691	2016
2.	A PID Controller with Anti-Windup Mechanism for Firming a Carbon Steel	Dr. R. Sumathi	International Journal of Engineering Research and Applications	Vol.6, Issue 3	2016
3.	Survey on Motes Used in Wireless SensorNetworks: Performance & Parametric Analysis.	Mr. V. V. Vineeth	Scientific Research Publishing	Published Online April 2016 in SciRes. http://www.scirp.org/journal/wsn	2016
4.	HARMONIC ELIMINATION IN DISTRIBUTED LINES		(ICIIECS'16)	----	2016

#	Title	Author	Journal	Volume	Year
5.	A Prototype Development of MPPT Algorithm based Solar Photovoltaic Charging System	Mr. S. Gobinath	International Journal of Engineering and Management Reserach	Vol 6 No.2	2016
6.	Maximum Power Point Tracking Using Fuzzy Logic Control for Photovoltaic Systems		International Journal of Trend in Research and Development,	Vol 3 No.2	2016
7.	Internet of Things (IOT) Based Energy Meter		International Research Journal of Engineering and Technology	Vol 2 No.4	2016
8.	Color image segmentation using similarity based region merging and flood fill algorithm	Mr. K. Muthukumar	International Journal of Engineering Inventions	Volume 5, Issue 06	2016
9.	Alcohol Detected Engine Turnoff System	Ms. G. Maha Lakshmi	International Journal of Trend in Research and Development,	Volume 3(1), ISSN: 2394-9333	2016
10.	Comparative Analysis Of Three Phase, Two Level And Three Level PWM Inverter Fed Induction Motor Drive Using Matlab/Simulink Model		International Journal of Emerging Trends in Electrical and Electronics	Vol. 12, Issue. 1, January-2016	2016
11.	Comparative Analysis Of Three Phase, Two Level And Three Level PWM Inverter Fed Induction Motor Drive Using Matlab/Simulink Model	Ms. R. Hemavathy	International Journal of Emerging Trends in Electrical and Electronics	Vol. 12, Issue. 1, January-2016	2016
12.	"Power Quality Improvement and Sensorless Control of BLDC Motor"	Mr. U. Arun kumar	International Journal of Control Theory and Applications	Volume: No.9 (2016) Issue No. :12 (2016)	2016
13.	Analysis of Emission and Fuel Economy in a Plug in Hybrid Vehicle using Various Control Strategies	Mr. T. Nandha Kumar	JOURNAL of POWER ELECTRONICS & DEVICES	Volume 2 Issue 1	2016
14.	Wireless Electric Power Transmission using Solar Power based Satellite		Journal of Embedded Systems and Processing	Volume1 Issue 2	2016

15.	Linearized Transfer Function Model of Industrial Heavy Duty Gas Turbine Plants	Ms. S. Sarumathi	(ICIIECS'16)	Vol.7 pp 542-547	2016
16.	Fault Ride through technique in Doubly Fed Induction Generator based Wind Turbines	Dr. N. Manonmani	International Journal of Applied Engineering Research		June 2015.
17.	Grid connected PV power generatingSystem using CUK converter andTransformer less h5 inverter	Ms. J Karthika	International Journal of Engineering Research and Science and Technology	Special Issue, Vol. 1, No. 2,	April 2015
18.	Modelling and Synchronization of Wind/PV Hybrid System with the Grid Using PLL		International Journal of Innovative Research in Science, Engineering and Technology	Vol. 4, Special Issue 6,	May 2015
19.	A comparative analysis of MPPT schemes for PV systems operating under non uniform irradiance and partial shaded conditions	Ms. R. Geethamani	IJISET – International journal of innovative science , engineering and technology	Vol 2 & Issue 4	April 2015
20.	An adaptive incremental resistance MPPT controller for PV system under partial shading condition		IJIRSET – International journal of Innovative research in Science , Engineering and Technology	Vol 4 &Spl Issue : 4	April 2015
21.	Intruder detection and prevention in a smart grid communication system	Ms. Sindhu S	Elsevier's international journal "procedia technology"		2015
22.	Smart survey on demand response potential in global energy market	Mr. V.V. Vineeth	Elsevier's international journal "procedia technology"		2015
23.	Intruder detection and prevention in a smart grid communication system		Elsevier's international journal "procedia technology"		2015
24.	A novel approach in demand side management for smart home		Elsevier's international journal "procedia technology"		2015

25.	Analysis of PMSG in wind integration using T source inverter with simple boost control technique	Ms. S.V. Krithika	International Journal for Trends in Engineering and Technology	5& 1	May 2015
26.	Bitstream and Bitstuffing Compression for Lossless methods		International Journal of Applied Engineering Research(IJAER)	10 &61	May 2015
27.	Power factor Improvement of Vector Controlled PMSM drives	Mr. K. Vijayakumar	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering	4&3 pp 1550-1563	March 2015
28.	Investigation of Harmonic Content and Power Factor Improvement for Single Phase AC-DC Converter Topologies		International Journal of Innovative Research in Science, Engineering and Technology	4 & 4	April 2015
29.	Fault detection in three phase induction motor	Ms. A. Selvanayakam	IJIRSET – International journal of Innovative research in Science , Engineering and Technology	Vol 4&Spl Issue :4	April 2015
30.	Implementation of state space dqo model with s-transformation based z-source matrix converter for wind energy system	Ms. B. Niranjana	Australian journal of basic and applied sciences	Vol 9&SplIssue :5	March 2015
31.	Area optimized in storage area network using novel mix column transformation in masked AES	Ms. M.Suganya	International Journal of engineering trends & technology	Vol 20 &Spl Issue :6	Feb 2015
32.	Grid Stabilization and Power Quality Enhancement Using Voltage Source Converter based High Voltage Direct Current and Model Predictive Control	Mr. A. Madhan	International Journal of Applied Engineering Research	ISSN 0973-4562 Vol. 10 Issue No.59	2015
33.	Published a paper entitled "A novel method of control strategy in DFIG wind system under unbalanced condition"	Dr. N. Manonmani	Applied mechanics and materials	Vol. 550 (2014) pp 166-171	February 14th, 2014
34.	Published a paper titled "A Survey on Low Voltage Ride Through Techniques For DFIG based Wind Turbines"		International Journal of Innovative Science and Technology	Volume 1, Issue 6	August, 2014
35.	Published a paper titled "A Review of Maximum Power Extraction Techniques for Wind		International Journal of Innovative Science and Technology	Volume 1, Issue 6	August, 2014

	Energy Conversion Systems"			
36.	MPPT Techniques for PV Systems under Different Scenarios: Review		International Journal of Innovative Science and Technology	Volume 1, Issue 6	August 2014
37.	DSP based maximum power point tracking (MPPT) for Improving the performance of DFIG	Ms. J Karthika	Applied Mechanics and Materials	Vol. 550 pp 157-165	2014
38.	Survey on various MPPT techniques on WECS (DFIG)		International Journal of Advanced Information Science and Technology (IJAIST)	Vol.23, No23	March 2014
39.	Growing Neural Gas Based MPPT For High Performance Wind Generator Using DFIG		Indonesian Journal of Electrical Engineering	Vol 12, No 8:	Aug 2014
40.	Implementation of state space dqo model with s-transformation based z-source matrix converter for wind energy system	Ms. B. Niranjana	Australian journal of basic and applied sciences	Vol 9 &Spl Issue :5	March 2015
41.	Power quality improvement using fuzzy based canonical switching cell converter	Mr. U. Arun Kumar	International Journal of engineering research and technology	Vol 3 &Spl Issue :12	December 2014
42.	Dual inverter based wind energy conversion system	Ms. A. Radhika	International Journal of advanced information Science and technology	Vol23, no23	2014
43.	Power Conversion Performance and the Suitability of Z-Source Inverter of PMSG Based WECS at Variable Wind Speed Conditions		Applied Mechanics and Materials	Vol. 550,P144	2014
44.	Effective hybrid for single phase cascade multilevel inverter using carrier based space vector PWM techniques	Mr. S. Bagavathy	International Journal of Advanced Information Science and Technology	Vol.23, No23	March 2014
45.	DTC of IM drive using PI controller for torque ripple minimization using SVPWM		International Journal of Advanced Information Science	Vol.23, No23	March 2014

	technique		and Technology		
46.	Design Of High Step Up Dc-Dc Converter For Fuel Cell Applications	Ms. N. Ramya Rani	Advanced Information Science and Technology (IJAIST)	Vol.23, No23,	March 2014
47.	Implementation of Embedded Floating Point Arithmetic Units on FPGA		Applied Mechanics and Materials	Vol. 550 (2014) pp 126-136.	2014
48.	Smart socket: A novel approach in regulating nonlinear load using power factor measurement	Ms. K.V.Poovizhi	International journal of scientific & Engineering Research	Vol.6 ISSUE 4	2014
49.	Domino Based Low Leakage Circuit For Wide Fan-In Or Gates	Ms. S. Sindhu	Journal of Programmable Device and Circuits and Systems	Volume 6, No.3, pp 105-108	2014
50.	Fault management in a secure smart grid system	Mr. V.V. Vineeth	ICETREE international conference on emerging trends in electrical engineering	Chapter no.2	2014
51.	Novel Approach on optimizing power system stabilizer and enhancing transient stability using ETAP 7.0.0 &synchrophasors	Ms. A. Selvanayakam	International Journal of Electrical & electronics Engineering	Vol. 4 Issue 2	2014
52.	Analysis of Fault on 1.5 Mw Wind Power Plants	Dr. N.Manonmani	International Journal of Power System Operation and Energy Management	Volume 2. Issue 3, 4,2013, Pp2231–4407	2013
53.	A novel control strategy for a DFIG based wind power under unbalanced conditions		Applied mechanics and materials	Volume 550,2014, Pp166-171	2013
54.	Survey on various MPPT techniques on WECS(DFIG)	Ms. J. Karthika	IJAST	Vol.23 no 23,march 2013	2013

S.No					
55.	DSP based maximum power point tracking in (MPPT) for improving the performance of DFIG		Applied mechanics and materials	Volume 550,2014, Pp157-165	2013
56.	"Analysis of 31 level cascade inverter using MATLAB",	Ms. G. Mahalakshmi	International Journal ofAdvances in Engineering and Technology,	Vol.6 ,issue 5, Nov 2013	2013
57.	Analysis of Fault on 1.5MW Wind Power Plants	Dr. N.Manonmani	International Conference on Electrical engineering and Computer Science	30 June, 2012	2012
58.	Detection of Improvised Explosive Devices Using Nanotechnology	Mr. K. Muthukumar	AJES	Vol.1 No.1	2012
59.	Detection of IED using nano technology		CIIT international journal of biometrics & bio informatics	Vol 4, No 1,jan 2012	2012

Consultancy Projects

S.No	Name of the Organization	Project Details	Duration	Team Members
60.	Salzer Electronics limited, Micro Magnetic Technologists(For project testing)	Efficient cost reduction technique for industrial outdoor lightings	6 Months	Mrs.N.Manonmani Muthukumar M , Sathishkumar M, Srinivas K
61.	SS Systems	Solar Power Conditioning Unit	6 Months	Mr.Gobhinath S, Abhinav Ram P.S, Gowtham Vijayaraj, Lokesh S
62.	Caliber Embedded Technologies	A Fuzzy controller for MPPT of a Photovoltaic System	6 Months	Mr.Gobhinath S, Gokulnath K, Gowthami P, Guna Sundari N, Karthick I
63.	Caliber Embedded Technologies	Powerloom automation	6 Months	Ms.A Sruthi Nivetha E,Sindhuja P, Thivya V,Vidhya M
64.	Wipro Technologies	SAP	6 Months	Ms.Nalina BS Gowthan V
65.	ZOHO Corporation	ZOHO Finance - Tax Engine	6 Months	Ms.A Sruthi Gokul K
66.	Caliber Embedded Technologies	Water Dispenser controller	6 Months	Mrs Krithika S V Anupriyanka R U, Indubala S, Indira T
67.	Vuram Technologies Pvt Ltd	Telecom Access Request Application	6 Months	Mrs Revathi R Arun Manoj S
68.	Vasantha Advanced	Light Load efficiency improvement using buck derived single	6 Months	Mr.Bagavathy S Priyanka V,

	Systems	stage single switch PFC converter		Priyasivadharshini T N
69.	Robert Bosch Engineering and Buisness Solutions - Coimbatore	Intelligent Infotainment Automation System - Bosch Infotainment systems	6 Months	Mrs. R. Revathi Mahesh Kumar K U
70.	Robert Bosch Engineering and Buisness Solutions - Coimbatore	Sensorless initial rotor position estimation of permanent magnet synchronous motor	6 Months	Ms.T.Bhavatharani Pranesh S
71.	Robert Bosch Engineering and Buisness Solutions - Coimbatore	Estimation of Power Losses and Temperature in DC Link Capacitor of three phase Inverter	6 Months	Ms. A. Minupriya Sivapriya S
72.	Innovative Machinery Systems	Train Lavatory Automation System	6 Months	Mrs.G.Mahalakshmi Presenna Kumar Babu , Ram Prakaash R
73.	Industrial project-Salem steel plant	An analysis of thyristor fuse failure in AC/DC drives	6 Months	Mrs.R.Revathi Priyanka.A, Shalini.M, Sindhuja.V, Veena sruthi.K
74.	Robert Bosch Engineering and Business Solutions - Coimbatore	Power loss and Temperature Estimation in Inverter's IGBT Without Temperature Sensors	6 Months	Ms.A.Sruthi Akshaya M
75.	Roots Industries Horn Division-Coimbatore	Texas Digital Ohm meter with Automatic Detection	6 Months	Ms.A.Minupriya C.Poornimadevi, Sanjana Govind,S. Savitha
76.	SAIL -Steel Authority Of India Limited	PLC Based Coin Counting Machine	6 Months	Ms. Nalina BS Pavithra Devi .R , Rupika .R , Shakthi vikashini .M , Shalini .Ml
77.	Zoho Corporations	Data Center Infrastructure Management	6 Months	Mr.V.Vineeth A.Mughil
78.	CityTex Corporation, Coimbatore	Multifunctional Counter in Textile Manufacturing.	6 Months	Mr.Parthasarathy.R Sarayu.M Sharmila P Prema priya.R
79.	Mettur Thermal Power Station-I	ZigBEE Based Monitoring of Generator Parameters	6 Months	Ms.Karthika.J Vishnuvarthan.L Ravi kiran.B
80.	Bharat Heavy Electricals Limited, Trichy.	Automatic Control of Furnace	6 Months	Ms. Radhika.A Vairavan.P Nandhagopal.G Gokulakannan.P
81.	Roots Industries India Limited, Coimbatore	BeeperAlarm Sound Measurement System Using PLC and HMI	6 Months	Ms.Mahalakshmi Rebecca Merlin Rozario
82.	Dinu Technology, Research and Development, Coimbatore	PLC Based Automatic Testing Machine	6 Months	Ms.C.Pavithra Balraj.V Bala kumar.K Harishponvignesh.D
83.	HCL Info systems Ltd	Continual Observation On Crop Growth Using Wireless Sensor Network	6 Months	Ms.K.Sithara Shruthi Sudevan
84.	Sree Pooja Industries, Coimbatore	Smart Irrigation Using GSM Module	6 Months	Ms.K.Sithara Tamilselvi.P-(I-SP)

85.	INAUTIX, Bangalore	Design of Power Efficient Fixed Width Baugh-Wooley Multiplier	6 Months	Ms.K.Sithara Srinidhi.V
86.	Mettur Thermal Power Station-I	ZigBEE Based Monitoring of Generator Parameters	6 Months	Ms.Mohana.M Pavithran.S Sivaraj.R Hari narayanan.C
87.	Neyveli Lignite Corporation Limited, Neyveli	Remote Monitoring System for Borewell Skids at TPS-I Expansion of NLC Ltd Using WIFI Technology	6 Months	Ms.Saranya.R Harish kumar.M Sampon James.A Gopinath.N Suresh.K