

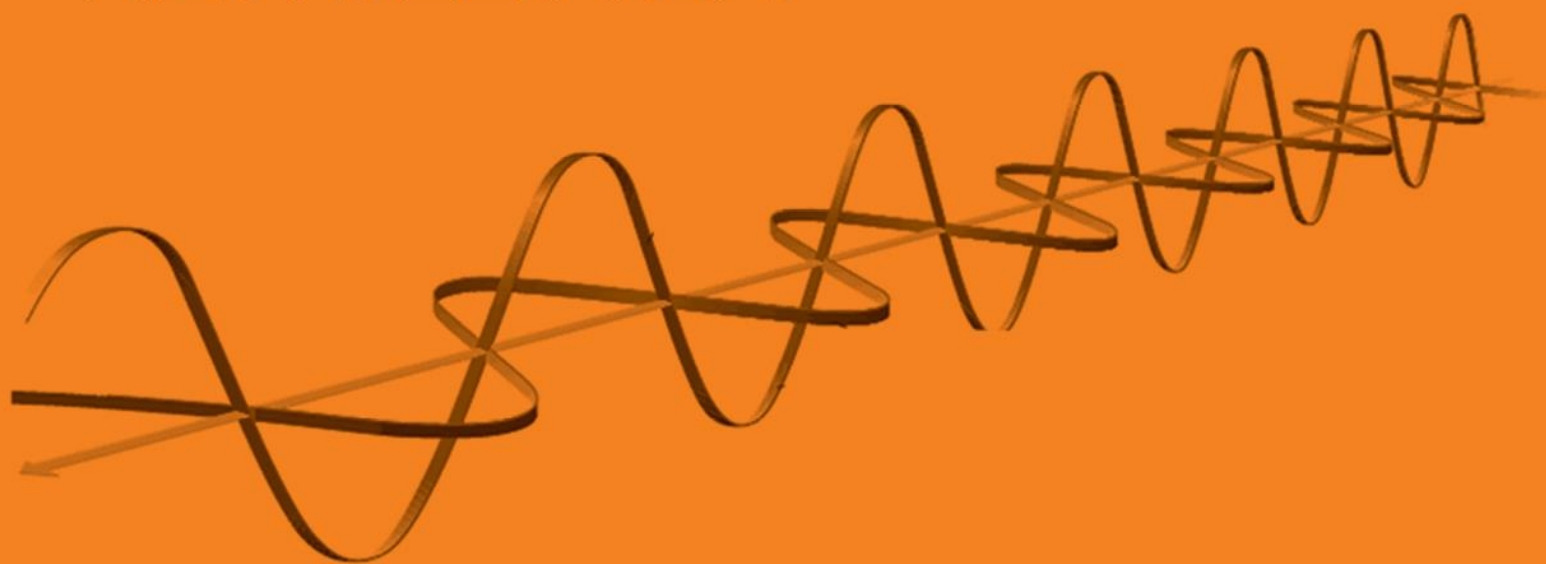
Department of
Electrical and Electronics
Engineering



NEWSLETTER – TECHNICAL MAGAZINE

ELECTROWAVES

NEWSLETTER



Two Days Hands on Training on “Solar PV Panel-Parameter Calculation, Testing & Installation”

The objective of this programme is to motivate the deserving Engineering community all over India to become successful entrepreneurs in the field of solar and wind energy systems by providing hands on training. At inauguration Prof.V.Kandasamy, AP-SRG/EEE welcomed the chief guest, participants and explained the theme of the Training Program.

The introduction of this workshop was given by **Mr.Alfred Vinod Antony**, Managing Director, Progen Energy solutions Pvt. Ltd. The technical sessions were delivered by **Mr.Vijay**, Senior Engineer, Progen Energy solutions Pvt. Ltd. He explained various concepts in solar PV Panel parameters calculation and testing methods and how to design solar panel design for utility scale, commercial and residential scale, Real time PV panel testing and calculation.

The UG students from EEE, E & I and ECE departments were interacted well with the resource person and shared their view in this field. Problems on solar PV panel parameter calculation were solved by students. In the last session, the hand on training was given by resource persons.



One day Seminar on “OPAL RT TECHNOLOGIES”

The seminar on OPAL RT Technologies was conducted by OPAL-RT Innovert Solutions during August 19th 2016 in the Department of EEE, Kumaraguru College of Technology. The objective of this programme is to provide insight about Real Time Simulation with Hardware-In-the-Loop HIL and Rapid Control Prototyping (RCP) systems.

This programme focuses on the following topics

- Integration of DER with Grid
- Controls and Automation aspects of Renewable Integration Renewable Sources
- MV & LV Drives Simulation
- Control Design for Drives
- Power Hardware in the Loop Simulation
- Controller for Power Converter
- High Level (Supervisory Control) and Low Level Controller Design (device controller)

Many research scholars and PG students are taking up work in the area of renewable energy, Micro grid and Smart grid. Also application of renewable energy sources in smart and micro grid systems can result in successful operation of delivering power with greater efficiency at remote areas. This programme will facilitate researchers, academicians to take up research works, in their laboratories and institutions.



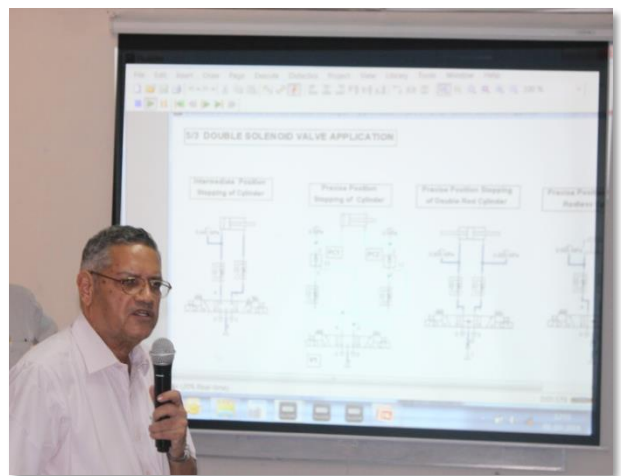
Two Days Industrial Hands on Training Workshop on “PLC Programming and Industrial Automation with FESTO India (P) Ltd

Two days Hands on Training Workshop on PLC Programming and Industrial automation with FESTO India(P) Ltd is arranged in the EEE Department of Kumaraguru College of Technology on 30.09.2016 and 01.10.2016

The Inaugural function was started in the B-Block Seminar Hall of KCT on 30.09.2016. Dr.R.S.Kumar-Principal, KCT was the chief guest who inaugurated the two days workshop with his address. He mentioned about the importance of PLC and automation. Dr. Senthil Kumaran, HOD-Mechanical and Dr. ,HOD, Mechatronics Department attended the Inaugural function. The resource person from FESTO India Pvt Ltd, Mr.V.Venkatesh then addressed the audience with the schedule of the workshop

Then after the Inaugural function, the theory session was started by the resource person where he explained the basic concepts of the PLC ladder logic and the automation technologies associated with the industrial area. Then the participants are brought to the Embedded lab where the practical session was started. There, the participants are trained with the various automation procedures with the PLC ladder logic and were made to complete some exercises in the industrial automation procedures for the remaining one and half days

The Two days Programme ended with the outcome that the participants gained the knowledge about the PLC ladder logic and the real time experience in the industrial automation with PLC.



FDPS / PROGRAMS / WORKSHOPS /SEMINARS /GUEST LECTURE ATTENDED BY FACULTY

Sl No	Faculty Name/Designation/ Department	Date From	Date To	Durat ion	Details of program attended	Outcomes of the program
1.	Mr.M MATHANKUMAR, Mr.T.Dinesh Kumar	11-06-2016	1-06-2016	1	Simulation of DC-DC converters using open source tools	Acquired the basics of DC-DC converters, Understood the Simulation of DC-DC converters using open source tools
2.	Mr.S.Kaliappan	14-06-2016	16-06-2016	3	Industry Academia Connect Program on "TWR-K40D100M Freescale Tower Board.	It will help students and faculty to work and develop embedded application using TWR-K40D100M Freescale Tower Board
3.	Mr.M.MATHANKUMAR, Mr.T.Dineshkumar	27-06-2016	29-06-2018	3	Power System Design & Analysis	Acquired the Power System Design, Load Flow Analysis using Power Factory Software
4.	T.SHANTHI	15-06-2016	21-06-2016	7	FDP on Designing Learning Experiences for students in Networking & Telecommunication.	Experimental learning with network related topics.
5.	SURYAPRAKASH S	09-12-2016	10-12-2016	2	REALIZATION OF INTERNET OF THINGS USING RASPBERRY BASED APPLICATION	TO SHARE THE KNOWLEDGE AND TO INNOVATE IOT BASED APPLICATION
6.	T.Dineshkumar, Mr.M.Mathankumar	27-06-2016	29-06-2016	3	FDP on Power system Design and Analysis	Learnt power factory software
7.	Mr. C. SASIKUMAR	22-07-2016	22-07-2016	1	Webinar on accurate & timely insights into variable renewable energy wind & solar forecasting & scheduling in india	Understand and able to design mathematical model of Forecasting

8.	Mr.C.SASIKUMAR	05-07-2016	05-07-2016	1	Webinar on Smart Grid Software (Typhoon HIL)	Able to Co-design the Smart Grid Environment (Simulation and Hardware)
9.	Mr. J. RAMPRABU	13-07-2016	13-07-2016	1	Webinar CIRCUIT SIMULATION / PCB DESIGN	gained knowledge about circuit simulation and wpcb design
10.	Mr. S.Kaliappan	13-07-2016	13-07-2016	1	Online FDP on Circuit Simulation / PCB Design Using Target 3001! Software	To learn Circuit Simulation in various applications. To learn PCB Design Using Target 3001! Software
11.	Mr. M. Babu Prasad, Mr. S. Kaliappan, Mr. V R Balaji	06-06-2016	12-06-2016	7	Anna University sponsored Faculty Development Programme on Bio Medical Instrumentation	Knowledge about the bio mechanism and sensor and controls
12.	Dr.R.Kavitha	15-02-2016	21-07-2016	7	Modelling and simulation of non-linear Electrical system	To gain exposure to mathematical modelling of Electrical system and apply it in modelling power converter
13.	Mr.S. Arun Kumar	11-07-2016	11-07-2016	1	Simulation of DC-DC converters using open source tools	Knowledge about simulation of converters using Open source tools
14.	R.SURESHKUMAR	24-08-2016	24-08-2016	1	PV SOLAR POWERPLANT DESIGN AND OPTIMIZATION	Gained Knowledge In Solar Power Plant Design
15.	M.MOHANRAJ	08-09-2016	08-09-2016	1	One day workshop on " Intellectual Property Rights & Innovations"	Knowing the CIPR in anna university and patent application process
16.	Mr.J. RAMPRABU	07-09-2016	07-09-2016	1	Impact of Intellectual Property Rights on Start Ups & Innovation and Existing Enterprises of MSMEs	Gained knowledge about intellectual property rights and patent filling procedure and government policys

17.	Ms. M.Nirmala	21-09-2016	27-09-2016	7	Design and application of solar P.V and wind energy system	To Enhance the design knowledge and useful far applying research proposal
18.	Ms. T.Shanthi	21-09-2016	27-09-2016	7	Design and application of solar PV and wind energy system	To enhance the design knowledge and useful for applying research proposal
19.	Mr. M. Babu Prasad	02-09-2016	02-09-2016	1	Anna University sponsored One day workshop on "Intellectual Property Rights and Innovations"	Knowledge about the pattern filing, Innovation procedures and solution finding for engineering problems
20.	Mr. M.MOHANRAJ	08-09-2016	08-09-2016	1	IPR Program	To know the CIPR cell activities and its details about patent
21.	Dr.R.Mahalakshmi	08-09-2016	08-09-2016	1	Workshop on IPR	To know about CIPR activities and patent details
22.	Mr. R. Rajesh, Mr. S. Surya Prakash	18-10-2016	18-10-2016	1	RESEARCH CHALLENGES IN INTELLIGENT POWER SOURCES FOR WELDING	TO GAIN KNOWLEDGE ABOUT THE USE OF POWER CONVERTERS USAGE IN WELDING. TO GAIN KNOWLEDGE OF FPGA DEVICES USED FOR WELDING.
23.	Dr.C.Udhaya Shankar	10-11-2016	11-11-2016	2	CII national conference on Renewable energy	Fostering investment in Tamil Nadu
24.	Mrs.D.Sharmitha	09-11-2016	15-11-2016	7	One week faculty development Programme on "Smart Grid and Smart City"	Know about smart city and smart grid for sustainable life.
25.	Mrs.P.Maithili	09-11-2016	15-11-2016	7	One Week FDP Programme on "Smart Grid and Smart City"	Understand the recent research issues on smart grid and smart city.Power Electronic Converter topologies and Communication system in smart grid.

26.	Maithili.P	19-11-2016	19-11-2016	1	A learning Module on "Winning Proposal Writing" organized by KLDA,KCT	Learned about how to prepare a proposal and list of leading funding agencies.Able to know the concept of Collaborative research proposal.
27.	M.MATHANKUMAR	14-11-2016	19-11-2016	6	FDP ON EMBEDDED SYSTEMS - FOR A CONNECTED TOMORROW	EXPLORED THE AREAS OF EMBEDDED SYSTEMS TO CONNECT OPEN SOURCE TOOLS. INTERFACED THE VARIOUS INTERFACES WITH PROCESSOR BOARDS.
28.	T.Viswanathan	28-11-2016	04-12-2016	7	FDTP on ADHOC AND SENSOR Networks	Learnt the Adhoc networks and Wireless protocols used for students project

PROGRAMS/ ACTIVITIES ORGANIZED BY THE DEPT. ASSOCIATION

Sl No	Date from	Date to	Details of program/Activity	Details of cheif guest	No of participants	outcomes
1	21-07-2016	25-07-2016	DA Office Bearer Selection Process / Mr.M.Mohanraj	-	10	-
2	21-07-2016	25-07-2016	DA Office bearer selection process	-	10	-
3	24-08-2016	24-08-2016	Think Tank Program	Our Students	25	Finding New Ideas
4	02-09-2016	02-09-2016	Association blog opening	our Students	10	New blog
5	17-09-2016	17-09-2016	Association Inaguration	C. Sathyamurthy, / Aqua Sub Engineering / Coimbatore.	230	Industrial Interaction
6	17-09-2016	17-09-2016	Association Inaguration	Mr.Sathyamoorthy, Vice-President, Acqa-sub Engineering, Coimbatore	300	Association Inaugural function

**FDPS / PROGRAMS / WORKSHOPS /SEMINARS
/GUEST LECTURE ORGANIZED BY FACULTY**

Sl No	AA D No	Resource Person Details	Date From	Date To	Duration	Details of program Organized	Outcomes of the program
1.	(O) 2474	G.Anu Shree/AP/EEE N.Mohana Sundaram /AP/EEE	13-06- 2016	18-06- 2016	6	One Week course titled "Communication Skills and C Programming Training" for III Year Lateral Entry Students	Communication skill and C programming training given to lateral entry students
2.	(O) 2539	Shri.Kamal sundramoorthy, Director, SK engineering Academy, Chennai	02-07- 2016	02-07- 2016	1	GATE and public sector exams awareness program	At the end of session , student got awareness about GATE and PSU exam preparation, eligibility and procedure to apply.
3.	(o) 2650	EEE Department faculty	21-07- 2016	10-08- 2016	10	Placement drive for lateral entry students	At the end of class, student will get confident to appear core competitive exams.
4.	(O) 2605	Mr.Alfred Vinod Anony Mr.Vijay, Progen Energy Solutions	28-07- 2016	29-07- 2016	2	Two days hands on training on "Solar PV Panel-Parameter calculation, Testing Installation'	Panel parameters calculation and testing methods and how to design solar panel design for utility scale, commercial and residential scale, Real time PV panel testing and calculation.
5.	(O) 2639	Pratheek Gupta, Innovian technologies	27-07- 2016	28-07- 2016	2	IOT workshop for smart engineers	IOT practical hands on session is carried out with different project titles.
6.	(O) 2539	Prof.Kamal S K Academy	02-07- 2016	02-07- 2016	1	Gate & Public Sector exams awareness Program	At the end of session student will be able to know the importance of gate exam

							and how to apply prepare to these exams.
7.	(O) 2650	EEE FACULTIES	21-07-2016	30-07-2016	8	PLACEMENT DRIVE FOR LATERAL ENTRY STUDENTS	TO ENHANCE THEIR CORE KNOWLEDGE
8.	(O) 2639	Mr Prateek Gupta from Innovian Technologies	28-07-2016	29-07-2016	2	Two Days National Level Workshop titled "IoT - Internet of Things for Smart Engineers (ISEN '16)"	Students acquired the practical knowledge about the new thing IoT on electrical circuits
9.	(O) 2605	Mr.Alfred Vinod Antony Mr.Vijay Progen Energy Solutions	28-07-2016	29-07-2016	2	Hands On training Program on PV Panel-Parameter Calculation, Testing & Installation	Students acquire practical knowledge about PV panel parameters calculation, installation and testing
10.	(O) 2639	Mr. Prateek Gupta, Director Innovians Technologies	27-07-2016	28-07-2016	2	IoT- Internet of Things	Students gather knowledge about interfacing internet of things (Sensors, Arduino and Internet Control)
11.	(O) 2751	Mr.Gopalakrishanan, OPAL RT-Innovert Solutions	18-08-2016	18-08-2016	1	Real Time Simulation on OPAL RT Technologies	To Provide hands on training on Integration of DER with Grid and Power Hardware in the Loop Simulation. It is useful for the participants to do their research and consultancy projects
12.	(O) 2840	Mr.Anbarasu / Client Relation office Allinov Research Development	08-09-2016	08-09-2016	1	Guest Lecture on - Filling a patent	The final year students got ideas how to file a patent and also able to know the importance of registering their ideas and product.
13.	(O) 2841	Mr.M.Anbarasu / Client Relation Office Allinov Research Development.	08-09-2016	08-09-2016	1	Guest Lecture on Intellectual property Rights	The faculties got exposure to the procedures in filing a patent in order to convert their own projects into ideal property and also understand the benefits

							while registering for a patent.
14.	(O)2 796	V.Venkatesh Festo India Private Limited	30-09- 2016	03-10- 2016	1	Two days hands on training on PLC Programming and Troubleshooting for Industrial Automation	THEY HAVE MADE ROBOTICS AND PLC LAB VISIT AT THE END OF THIS COURSE.
15.	(O)1 5091 03	Mr. M. Abishek, Capacity Planning Manager, Amazon	19-09- 2016	19-09- 2016	1	Higher Studies in Business Administration	Students Got Knowledge about Higher Studies in MBA
16.	(O) 2959	Dr.R.S.Kumar BE (Hons) M Tech PhD Principal/KCT	21-09- 2016	21-09- 2016	1	Prelude event to start Dr.NM Chess academy	-
17.	(O) 2960	Dr.R.S.Kumar BE (Hons) M Tech PhD Principal/KCT.	28-09- 2016	28-09- 2016	1	Prelude event to start Dr.NM Chess academy	-
18.	(O) 2839	Mr.Ramesh,Director, Steps Knowledge Service Pvt Ltd	16-09- 2016	16-09- 2016	1	Hands on Training in OPEN SOURCE POWER SUPPLY DESIGN TOOL- WEBENCH.	To Provide hands on training on Power Supply Design tool- Webench. The participants can able to participate in webench design contest and win prizes
19.	(O) 2853	Dr.M.Venkata Kirthiga / Assistant Professor / EEE / NIT / Trichy	01-10- 2016	01-10- 2016	1	Seminar on "MICROGRIDS"	To enhance the research interest of students and faculties in sustainable energy Technologies
20.	(O) 2838	HOD / EEE	17-09- 2016	17-09- 2016	1	Parents Meeting	To interact with the parents of EEE students.
21.	(O) 2923	Mrs P.Maithili/AP/EEE Mr S.Arunkumar/AP/EEE	07-10- 2016	07-10- 2016	1	One Day Outreach Training Program nn Practical Demonstration of	Awareness created among the school students to handle electrical and electronic home appliances

		Mr K.Dhanaraj/LT/EEE				Handling The Electrical & Electronic Home Appliances for Beginners	
22.	(O)3 067	Mr.Shanmuga Sundaram,Director,TI Steps Knowledge Pvt.Ltd	17-11-2016	18-11-2016	2	Hands on Session on "Power Management Tool Kit-TI university Program	This session provides the hands on session on Buck, Boost, Low voltage regulator design for the participants. The participants can able to design & participate in the design contest.
23.	(O)3 085	Mr.S.Praveen , Senior Research Consultant, PRDC ,Bangalore	22-11-2016	22-11-2016	1	Faculty Industry Interaction	Acquired the knowledge of Current Scenario in Research of Renewable Energy
24.	(O)3 081	Dr.Gnandass BOYSCAST FELLOW PROF. Pondichery Engineering College	02-12-2016	02-12-2016	1	National Seminar on"Smart grid"	Recent Trends and Pilot Projects in Smart GRid
25.	(O)3 167	Mr. M. Jagathaguru	29-12-2016	29-12-2016	1	Realtime workshop on Embedded based drives	The students able to develop own hardware for their final year project.

DETAILS OF AWARDS

Sl.No	Name of the Faculty/Designation	Detail of Award	Title	Date & Duration
1.	J.J. Nandhini	NPTEL-ALL INDIA RANK 3		11-06-2016
2.	Mr. N. Prakash		Engal aasaan Award	03.09.2016
3.	Mr. N.Mohanasundaram		Engal aasaan	03.09.2016
4.	Mrs.P.Maithili		Teachers day celebration at KCT- Received award for Punctuality	03.09.2016

KCT Management Funded Projects

Sl No	AAD No	Faculty Name	Title of project	Amount	Submitted on	Status Report
1.		Mrs.T.Shanthi , Mrs.D.Rajalakshmi , Dr.R.Mahalakshmi	Design and Development of Grid Integration Technology for solar Energy with the Application of Power.	Rs. 3.7 (Lakhs)	01-06-2016	Approved
2.		Dr. P. Thirumoorthi, Mrs. K. Premalatha,	Design and Development of Brain Inspired Intelligent Controller for Active Power filter	Rs. 45,78,600/-	26-05-2016	Acknowledgement received
3.		Dr.Rani Thottungal Professor & Head Mr.B.Karunamoorthy Assistant Professor (SRG) Mr.R.Suresh Kumar Assistant Professor	Street Light	0.25 (Lakhs)	08-04-2016	Approved

4.	Dr.R.Mahalakshmi Professor Mrs.V.Sharmila Deve Associate Professor Dr.R.Kavitha Assistant Professor Mrs.D.Rajalakshmi Assistant Professor	Research setup of Solar PV System	2 (Lakhs)	01-06-2016	Approved
5.	Dr.Rani Thottungal Prof & HOD Dr.N.Prakash ASST Prof Mr.VR.Balaji ASST Prof	Design and Implementation of solar panels and Utilization for Machine Lab lighting and fan load Energy	0.93 (Lakhs)	12-02-2016	Approved
6.	T.Shanthi, D.Rajalakshmi & M.Nirmala AP(SrG)	Design and Development of Grid-Integration Technology for Solar Energy with the Application of Power Electronic Controller Interface	230000	22-07-2016	Sanctioned
7.	Dr.Rani Thottungal Professor & Head Mr.B.Karunamoorthy Assistant Professor (SRG) Mr.R.Suresh Kumar Assistant Professor	Street Light	0.25 (Lakhs)	08-04-2016	Approved

INTERACTION WITH OUTSIDE WORLD

I.No	Name of the Faculty/Designation	Internship/Others	Details	Event Period
1.	Ms.V.Sharmiladeve Ms.R.Kavitha	Consultancy – Design of Transformer	Amptech Transformer	July /2016

INDUSTRIAL VISITS ARRANGED FOR STUDENTS

SI No	Program/batch (year)	No of students	Name and address of the industry	Date of visit	Names of accompanying faculty
1	III EEE A		ABT Industry Limited	03-09-	
2	B.E. / EEE , II Year B		Kundha Power House	05-10-2016	
3	II EEE A Section	67	Kundha Power House, Ooty	06-10-2016	Ms.P.Maithili, Ms.V.Sharmiladeve, Mr.C.Udhayashankar, Mr.Suryaprakash
4	III Year EEE students	5	Swagath Industrial, Coimbatore	12-12-2016	K.Premalatha ASP /EEE
5	II ME PED	11	Kundha Power House, Ooty	27-01-2017	Dr.K. Premalatha Dr.M.Mohanraj

**PH.D. AWARDED TO
CANDIDATE**

Sl No	Mont	Year	Title of PhD word	Name of PhD scholar
1	Sep	2016	ANALYSIS OF Z- SOURCE MATRIX CONVERTER FOR WIND ENERGY CONVERSION SYSTEMS	Dr.V.KANDASAMY
2	Sep	2016	Certain Investigation in the Harmonics Reduction Of Impedance Source Inverter	Dr.B.Karunamoorthy
3	Nov	2016	DESIGN AND DEVELOPMENT OF A CONTROLLER FOR SELF EXCITED INDUCTION GENERATOR BASED WIND ENERGY CONVERSION SYSTEM	Dr.PREMALATHA K.
4	Dec	2016	Certain Investigations in WECS Incorporating FACTS Controllers for Power Quality Improvement	Dr. M.MOHANRAJ
5	Dec	2016	Certain harmonic investigations in hybrid system comprising RES using optimised converter topologies	Dr. D.Rajalakshmi



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