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New Delhi & Certified by ISO 9001:2015, <http://www.lbrce.ac.in>

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REPORT ON “RECENT ADVANCES IN POWER ELECTRONICS AND POWER SYSTEMS”

EventType	:Five Day Faculty Development Programme
Date/Duration	:09-11-2021 to 13-11-2021
ResourcePerson	1. K.Harinadha Reddy, <i>Vice-Principal, LBRCE</i> 2. Dr.I.Satish Kumar, NIT, Warangal 3. Mr.B.Siva Prasad, ADE, NTTPS, Vijayawada 4. Dr. Ch.Ravi Kumar, ANU, Guntur 5. Dr Bhaskara Rao Ravada, IIT, Bombay
Names of Coordinators	: Dr.G.Nageswara Rao, Professor Mr.J.V.Pavan Chand, Sr.Asst. Professor
TargetAudience	: External and Internal Faculty Members, M.tech and Research Scholar
Total no. of Participants	:81(External)+27(Internal)
Objective of the event	: To enhance the knowledge of participants in the area of Power Electronics and Power Systems

Outcome of event : Faculty were able to

- Understand the Island Detection in Integrated Power System using Power Electronics Converters .
- Understands Recent Advances in Thermal Power Stations
- Know the Power electronic converters
- Understand the Power Converters in hybrid electric vehicle (PHEV) systems
- Design the Modeling & Control of Electrical Systems
- Understand the Automatic Generation Control of Power Systems

Description/Reporton Event:

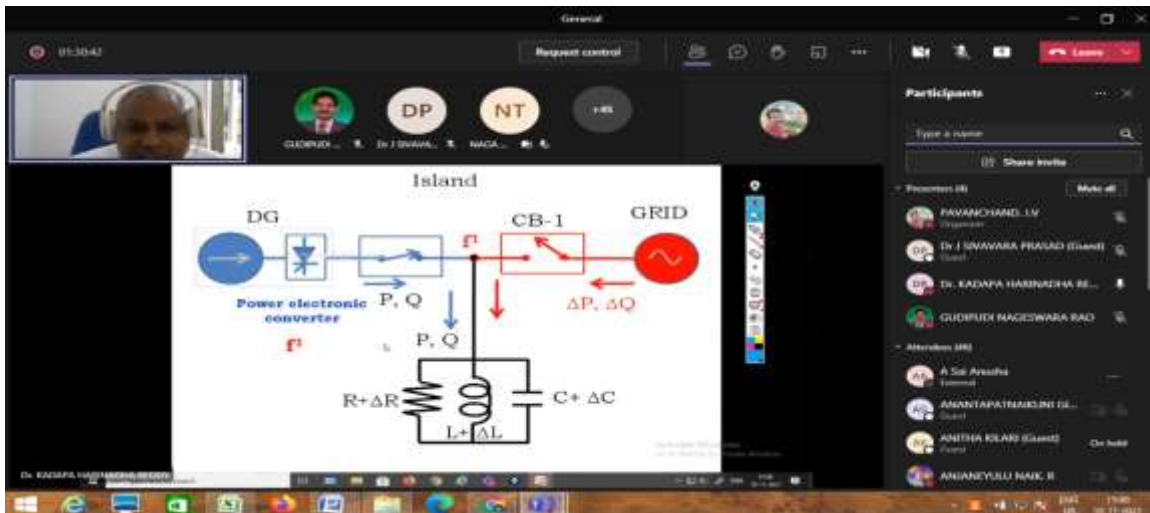
The FDP aims to provide opportunities to faculty members, research scholars and post graduate students to enrich their knowledge about the significance of recent technology and current research opportunities in their working domains.

The Program also provided excellent opportunities to exchange ideas on technical session. The sessions of this FDP was conducted by the team of eminent academicians and industry expert possessing in depth knowledge in the area of recent trends in power electronics and power systems. It consists of series of lectures. The FDP was attended by around seventy participants consists of faculty members and research scholars from various engineering colleges.

Photographs :

Day 1

The session was taken by Dr.K.Harinadha Reddy, Vice Principal, LBRCE, delivered a keynote address on Island detection in integrated power system using power electronics converters in which he discussed the introductory part and its importance. He also explained All Type of island techniques with simplified manner.



Day 2

In session, an informative lecture delivered by Professor Dr.Ch.Ravi Kumar, Assistant Professor, ANU from Guntur, on the overview of application of optimization algorithms to enhance the performance in transmission system using TCSC issues related with power electronics and drive. He also given introduction of Traditional methods of power control, advantage of power semiconductors devices, Turn on losses and turn off losses.

Application of Optimization Algorithms to Enhance the Transmission System Performance Using Thyristor Controlled Series Capacitor

Dr. CH. Ravi Kumar
HOD of Electrical & Electronics Engineering
Dr. Y.S.R. ANU College of Engineering & Technology

ACHARYA NAGARJUNA UNIVERSITY
Guntur

Day 3

In the session Mr.B.Siva Prasad, ADE, NTTPS, Vijayawada has illuminated us an overview of recent advances in thermal power stations, its history, importance and applications. introduce the re

The screenshot shows a Zoom meeting interface with a slide titled "Reference Plant". The slide contains the following technical specifications:

Client	Nippon Petroleum Refining Co., Ltd.
Plant	Osaka Refinery, Japan
Fuel (Sulfur Content)	Vacuum Residue (S=3~3.5%)
Generating Power	149 MW
Gas Flow Rate	637,700 Nm ³ /h(w)
Inlet SO ₂ Conc.	2,217 ppm(d)
	(6,339 mg/Nm ³)
Inlet Gas Temp.	155 deg. C
Desulfurization Efficiency	99.9 %
Startup	Jul. 1998
Absorber Type	DCFS

The slide also features a photograph of an industrial power plant facility. The Zoom interface shows a meeting titled "Meeting in 'General'", a recording notice, and a list of participants including "GUDIPUDI ...".

cent scenario of power plant establishment problems and technical challenges.

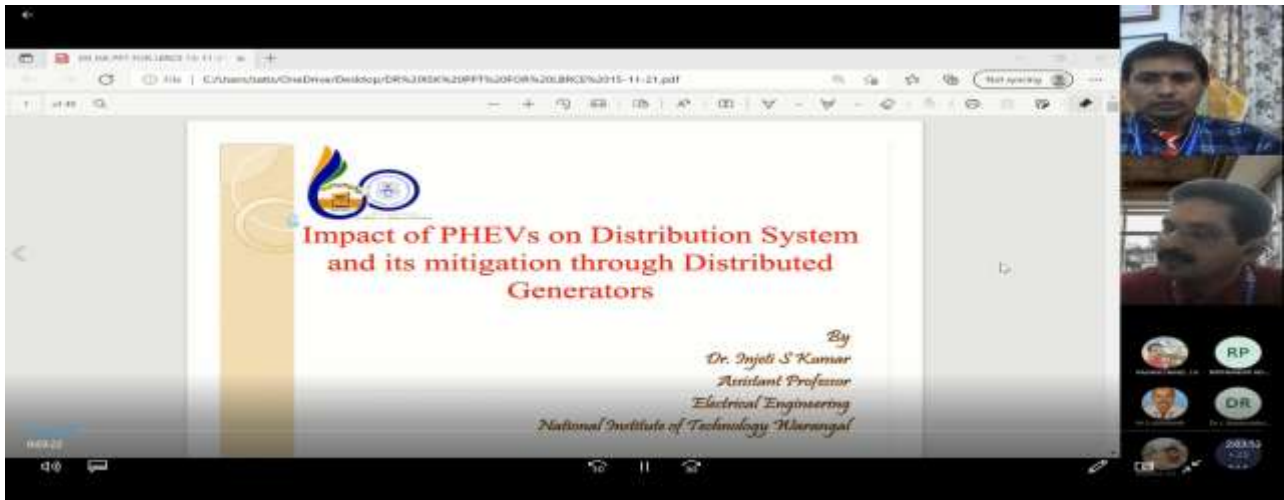
Day 4

In session Dr. R.Bhaskar Rao, IIT Mandi has taken a very interactive session on basics of the challenges & research aspects of electric vehicles.

The screenshot shows a Zoom meeting interface with a slide titled "HES CONTROL STRATEGIES". The slide contains two circuit diagrams, (a) and (c), and a graph showing the relationship between terminal voltage V_a (V) and armature current i_a (A). The graph shows a linear relationship between V_a and i_a , with a red arrow pointing to the slope of the line. The circuit diagrams show a motor drive system with a DC link, inverter, and motor. The Zoom interface shows a meeting titled "Meeting in 'General'", a time of 01:45:52, and a list of participants including "PWANCHAND. LV", "Bhaskara rao navade", "GUDIPUDI NAGESWARA RAO", "M S GRIDHAR", "A.Hina Bindu", "anandkumbhar (Guest)", "Avinash N J (Guest)", and "BHASKAR G (Guest)".

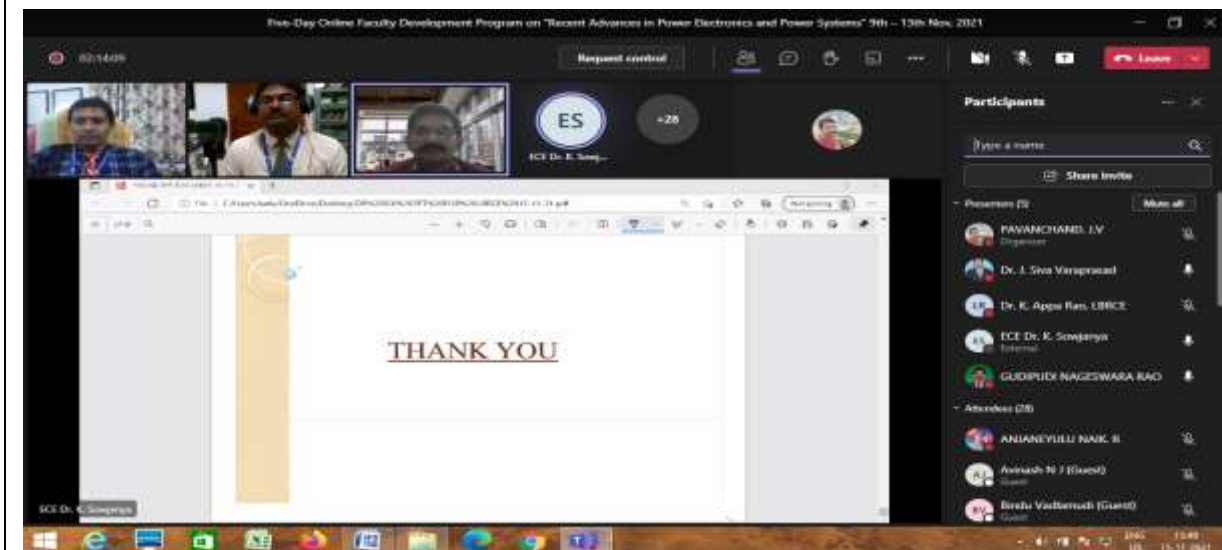
Day: 5

In session Dr. I.Satish Kumar, Assistant Professor, NIT Warangal ,discussed about power converters in hybrid electric vehicle (PHEV) systems



VALEDICTORY SESSION

The valedictory session was started at 03:40pm on 13th November 2021. The Honorable personalities present in the occasion were Sri G.Srinivasa Reddy President, LBRCE Pricipal, Vice Principal, Deans, HODs, FDP coordinators. After the welcome address, the ceremony started with presentation of brief summary report about the FDP by Dr.G.Nageswara Rao Professor, FDP coordinator. All the participants from various institutions appreciated the program and department for organizing the FDP in their feedback. After this certificates were presented to the participants, Principal sir addressed the gathering and shown his kind gratitude to the organizing department. He also encouraged the participants and emphasized on the benefits of such activities. Dr.J.Siva vara Prasad, Professor &HOD, convener of FDP had proposed vote of thanks to all the Committee members, who were the part of this 5 days faculty Development Program. Then, the valedictory session was concluded.



**ఆధునిక పరిజ్ఞానంపై
నైపుణ్యం పెంచుకోవాలి**

మైలవరం: ఆధునిక పరిజ్ఞానంపై నైపుణ్యం పెంపొందించుకోవాలని లకిరెడ్డి బాలరెడ్డి ఇంజనీరింగ్ కళాశాల ప్రెసిడెంట్ డాక్టర్ కె.అప్పారావు తెలిపారు. మైలవరం లకిరెడ్డి బాలరెడ్డి ఇంజనీరింగ్ కళాశాలలో ఎలక్ట్రికల్ అండ్ ఎలక్ట్రానిక్స్ ఇంజనీరింగ్ విభాగం ఆధ్వర్యంలో అధ్యాపక అభివృద్ధి శిక్షణ కార్యక్రమంలో భాగంగా రీసెంట్ అడ్వాన్స్ ఐన్ పవర్ ఎలక్ట్రానిక్స్ అండ్ పవర్ సిస్టమ్స్ అనే అంశంపై ఐదు రోజుల శిక్షణ కార్యక్రమం ఐదవారం ప్రారంభించారు. ఈ శిక్షణ కార్యక్రమాల ద్వారా జ్ఞానం పెంపొందించుకుని టీచింగ్, రెస్ట్రీకింగ్ ప్రొఫెసర్లు అభివృద్ధి చేయాలని, పరిశోధనా సామర్థ్యాలు మెరుగుపర్చుకోవాలన్నారు. వైస్ చాన్సలర్ డాక్టర్ కె.పాపారాధరెడ్డి మాట్లాడుతూ ప్రస్తుత పరిస్థితుల్లో అధ్యాపక అభివృద్ధి శిక్షణ కార్యక్రమం చాల ముఖ్యమని, బలాండ్ డివిజన్ ఐన్ ఇంటిగ్రేటెడ్ పవర్ సిస్టమ్స్ యూనింగ్ పవర్ ఎలక్ట్రానిక్స్ కన్వర్షర్ అనే అంశం గురించి వివరించారు. ఈఈఈ విభాగాధిపతి డాక్టర్ జి.శివవర ప్రసాద్ ప్రసంగించారు. డాక్టర్ జి.నాగేశ్వరరావు, జీ.పీ. పవన్ చంద్ లో అధినితర్కగా వ్యవహరించారు.

నంబ్బ 11/11/21



Coordinators:
Dr.G.Nageswara Rao
Mr.J.V.Pavan Chand