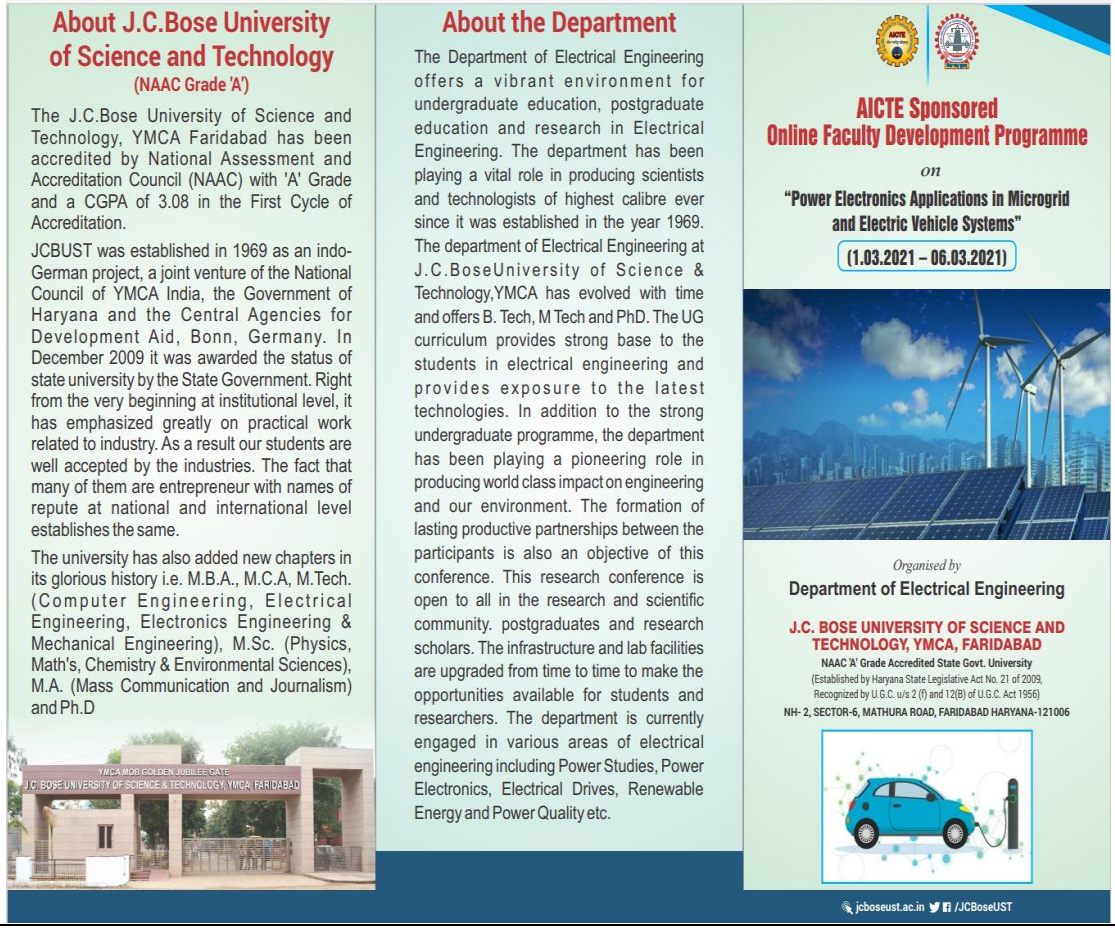
1. Name of the Activity:

Name of department/ Section/ cell conducting the activity	Electrical Engg department
In coordination with (if any)	AICTE New Delhi
Date of conduct	1 march 2021- 6 march 2021
Activity Coordinator	Mr.Satvinder singh Ms.Rachna Mr.Atma ram
Amount Spent	66784 rupess
Funding/ grant from (University/ Industry/ UGC/ AICTE/ DST/ TEQIP/ Outside Society/ agency/others (mention)	AICTE
Target audience:	Faculty members from technical institutions
No. of beneficiaries	91
Outside guests/ Details of Experts	14
Brief Description of	The objective of this programme is to equip the participants with working knowledge of fundamentals, design tools, current research and critical issues in the development of micro grid and Electric Vehicle systems. This

the event	programme will pave the way for understanding integration of renewable energy resources into the grid integrating renewable energies satisfying the grid codes, enable customer participation, energy storage support, battery, drives and controllers used in microgrid and Electric Vehicles. Some of the focus areas of the programme will be various control challenges in the areas of microgrid, protection issues, energy management and solution of interconnection issues of DG. Participants will also be exposed to the optimization techniques to improve the features of EV. This programme will also provide the participants with recent advancements in the area of microgrid and EV systems.
Attach Brochure of the event	

FDP Objective

The objective of this programme is to equip the participants with working knowledge of fundamentals, design tools, current research and critical issues in the development of micro grid and Electric Vehicle systems. This programme will pave the way for understanding integration of renewable energy resources into the grid integrating renewable energies satisfying the grid codes, enable customer participation, energy storage support, battery, drives and controllers used in microgrid and Electric Vehicles. Some of the focus areas of the programme will be various control challenges in the areas of microgrid, protection issues, energy management and solution of interconnection issues of DG. Participants will also be exposed to the optimization techniques to improve the features of EV. This programme will also provide the participants with recent advancements in the area of microgrid and EV systems.

FDP Outcome

Understanding of:

- Distributed Generation and Microgrid.
- Renewable energy integration.
- Recent advances in Microgrid technologies.
- Control and stability aspects in microgrid
- Role of power electronic converters in Microgrid and EV.
- Introduction to hybrid and electric vehicles.
- EV charging and the grid.
- EV architectures and environmental impact.

Resource Persons

The sessions will be delivered by eminent professors from IITs, NITs, foreign universities and industrialists in relevant field.

Important information about FDP

- No registration fee
- There are limited seats and the participants are selected on the basis of eligibility criteria and first come first serve basis.
- There will be a quiz at the end of FDP
- For the award of certificate, minimum attendance criteria of 80% and a minimum score of 60% in quiz shall be fulfilled.
- It's mandatory for all participants to submit feedback after each session.

Registration Link

***Registration Link*:**

https://docs.google.com/forms/d/e/1FAIpQLSfkjFMhc51g8vfNB_ieEZcSNm3dtw2fqmeSiv_rhsiU9VrpA/viewform?usp=pp_url

Contact details of Coordinators

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MrAtma Ram (+919899836017)
Electrical Engg. Department
J.C Bose University of Science and Technology YMCA, Faridabad.
Email ID: pea.jcboseust@gmail.com

Important Dates

Last date of registration:
28/02/2021

Patron
Prof. (Dr.) Dinesh Kumar (Vice-Chancellor)
J.C. Bose University of Science and Technology, YMCA, Faridabad

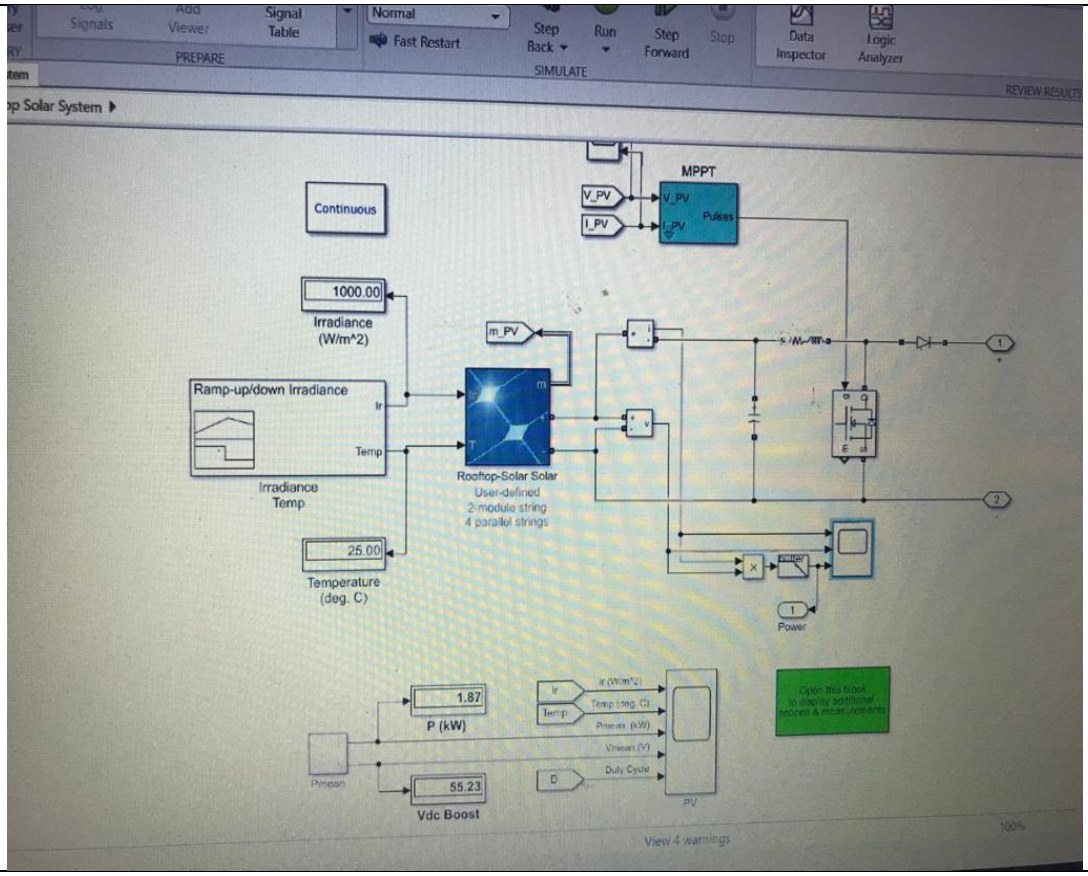
Program Chair
Prof. (Dr) Poonam Singhal (Chairperson)
Department of Electrical Engg.
J.C. Bose University of Science and Technology YMCA, Faridabad

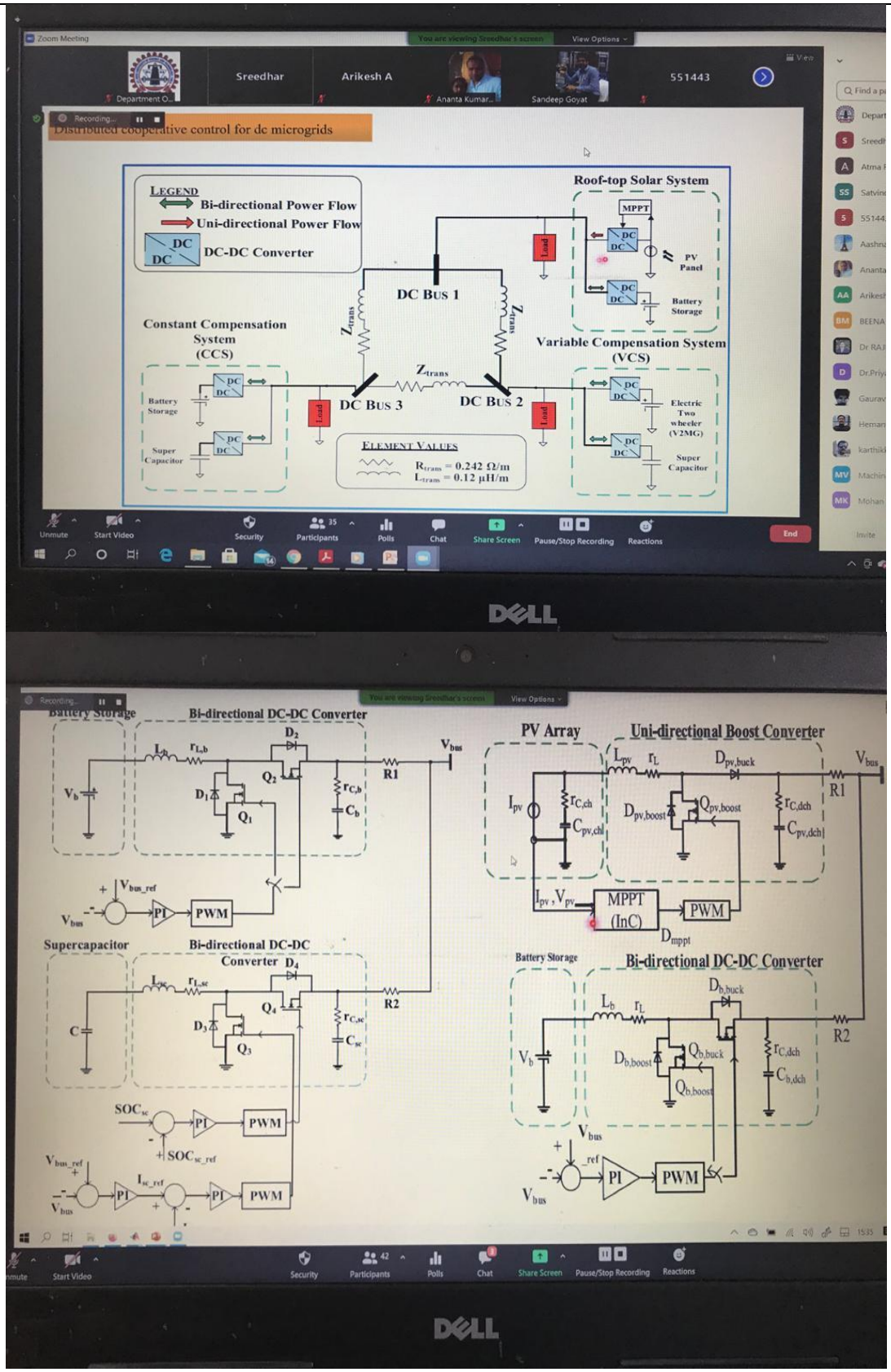
Advisory Committee
Prof. P.R Sharma
JCBUST, YMCA Faridabad
Prof. Rajesh Kumar Ahuja
JCBUST, YMCA Faridabad
Prof.Anju Gupta
JCBUST, YMCA Faridabad

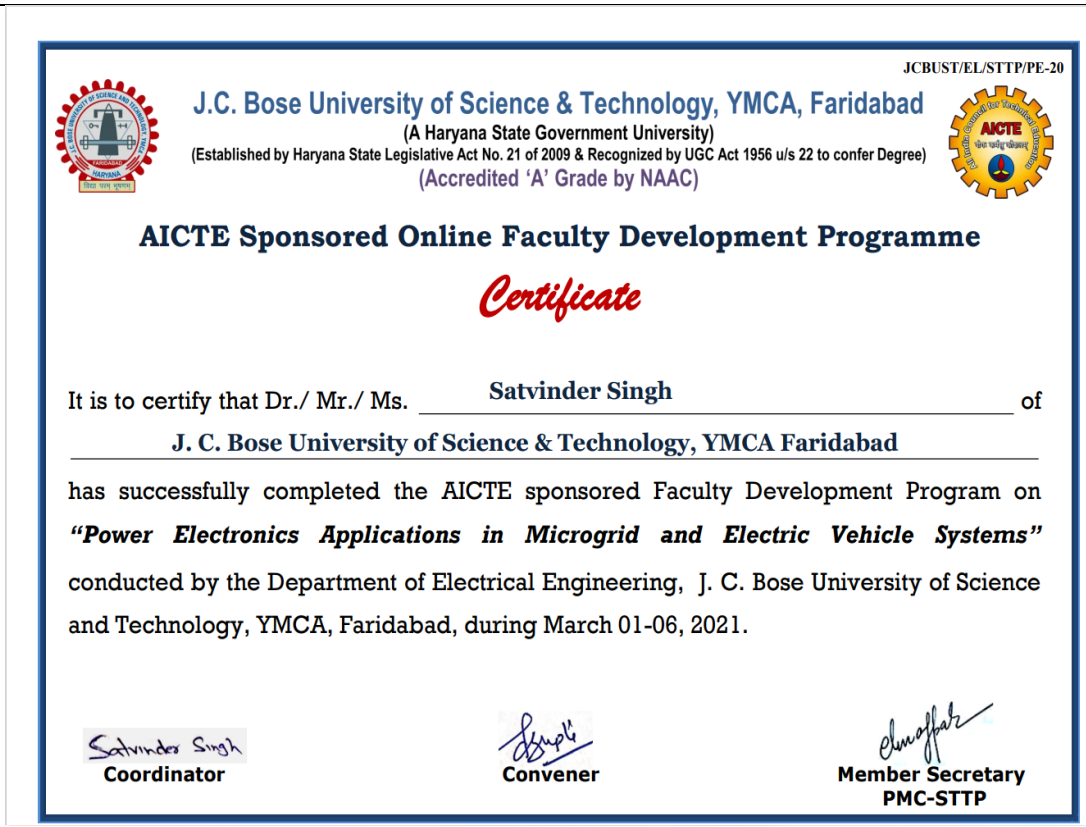
Program Coordinators
Mr Satvinder Singh (AP, EL)
Ms Rachna (AP, EL)
Mr Atma Ram (AP, EL)

Organizing Committee
Dr Shakuntala
Mr Nitin Goel
Dr Sakshi Kalra
Dr Rashmi Agarwal
Ms Anubha Gautam
Ms Shipra Aggarwal
Ms. Bharti Thakur

attach two/ three good quality photographs




Distributed cooperative control for dc microgrids
LEGEND
Bi-directional Power Flow
Uni-directional Power Flow
DC-DC Converter
Roof-top Solar System
MPPT
PV Panel
Battery Storage
DC BUS 1
DC BUS 2
DC BUS 3
Constant Compensation System (CCS)
Variable Compensation System (VCS)
Super Capacitor
Electric Two wheeler (V2MG)
ELEMENT VALUES
R_{trans} = 0.242 Ω/m
L_{trans} = 0.12 μH/m
Load
Battery Storage
Bi-directional DC-DC Converter
PV Array
Uni-directional Boost Converter
MPPT (InC)
PWM
PI
Supercapacitor
Bi-directional DC-DC Converter

Attach certificate of the event	
Any other information	

JCBUST/EL/STTP/PE-20

J.C. Bose University of Science & Technology, YMCA, Faridabad

(A Haryana State Government University)

(Established by Haryana State Legislative Act No. 21 of 2009 & Recognized by UGC Act 1956 u/s 22 to confer Degree)

(Accredited 'A' Grade by NAAC)

AICTE Sponsored Online Faculty Development Programme

Certificate

It is to certify that Dr./ Mr./ Ms. **Satvinder Singh** of

J. C. Bose University of Science & Technology, YMCA Faridabad

has successfully completed the AICTE sponsored Faculty Development Program on ***"Power Electronics Applications in Microgrid and Electric Vehicle Systems"*** conducted by the Department of Electrical Engineering, J. C. Bose University of Science and Technology, YMCA, Faridabad, during March 01-06, 2021.

Satvinder Singh
Coordinator

Convener

Member Secretary
PMC-STTP