



SHRI VILE PARLE KELAVANI MANDAL'S
Institute of Technology, Dhule
Approved by AICTE New Delhi | Affiliated to DBATU, Lonere

Department of Electrical Engineering

Academic Year 2022-23

FDP on "Power Quality Problems and due Solutions"

Objective	To train researchers with follow content: <ol style="list-style-type: none">1. Waveform Distortions and Power Quality Issues due to Grid Connected Converters.2. Signal Processing Techniques for Power Quality Studies3. Photovoltaic System Operation as DSTATCOM for power Quality Improvement Employing Active Current Control4. Enhancement in the Power Quality using FACTS5. FACTS Optimal Placement using GA in MATLAB6. Harmonic Elimination in A MPPT Based Solar Powered Cascade Multilevel Inverter7. Lower Order Harmonic Elimination by using Multi Pulse AC to DC Converter using MATLAB8. Techniques to Mitigate harmonics due to power electronics circuits9. Prospective of Power Quality Improvement studies in Typhoon HIL10. Prospective of Power Quality Improvement studies in Typhoon HIL- DVR Example11. Power Quality Improvements in Charging Stations12. Power Quality Measurements using Fluke13. Machine-learning methods applied to Power Quality Problems
Organizer	Department of Electrical Engineering SVKM's Institute of Technology, Dhule
Participating Class & Division	Faculty from Electrical Engineering of various colleges.
Date	30/01/2023 to 03/02/2023 (One Week)
Time	9:30 AM to 4:00 PM
Venue	Online – Microsoft Teams
Coordinator/s	Mr. Sandeep Ushkewar Organizing Team: Mr. Sandeep Ushkewar, Mr. Gaurav Patil, Dr. Namra Joshi, Mr. Jagdish More, Ms. Farha Naz, Mr. T. N. Shubham, Mr. Shahid Akhtar, Mr. Rahul Thakur, Mr. Jayesh Patil, Mr. Pankaj Bhavsar.
Name of Speaker with Designation	<ol style="list-style-type: none">1. Dr. Shimi S.L, Assistant Professor, NITTTR Chandigarh2. Pankaj Achlerkar (PhD, IIT, Delhi), System Design Engineer, GE , Noida3. Dr. Nishant Kumar, Assistant Professor, Indian Institute of Technology



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	<p>Jodhpur</p> <p>4. Mr. Rohit Kumar, PhD Student, IIT Delhi</p> <p>5. Dr Lini Mathew, Professor, NITTTR Chandigarh</p> <p>6. Mrs. Anjali Bhandakkar, Research Scholar, NITTTR Chandigarh</p> <p>7. Dr. Ravi Teja, Assistant Professor, IIT Ropar</p> <p>8. Shailendra Kumar, NIT, Bhopal</p>			
Brief report on activity	<ul style="list-style-type: none"> The FDP was conducted in below sequence. 			
	DAY & DATE	Live Session - 1 9.30 AM to 11. 00 AM	Live Session - 2 11.30 AM to 1.00 PM	Live Session - 3 2.30 PM to 4.00 PM
	Monday 30/01/2023	Course Inauguration & Lecture on Waveform Distortions and Power Quality Issues due to Grid Connected Converters		Signal Processing Techniques for Power Quality Studies
	Tuesday 31/01/2023	Photovoltaic System Operation as DSTATCOM for power Quality Improvement Employing Active Current Control	Enhancement in the Power Quality using FACTS	FACTS Optimal Placement using GA in MATLAB
	Wednesday 01/02/2023	Harmonic Elimination in A MPPT Based Solar Powered Cascade Multilevel Inverter	Lower Order Harmonic Elimination by using Multi Pulse AC to DC Converter using MATLAB	Techniques to Mitigate harmonics due to power electronics circuits
	Thursday 02/02/2023	Prospective of Power Quality Improvement studies in Typhoon HIL	Prospective of Power Quality Improvement studies in Typhoon HIL- DVR Example	Power Quality Improvements in Charging Stations
	Friday 03/02/2023	Power Quality Measurements using Fluke	Machine-learning methods applied to Power Quality Problems	STC Valediction
Duration of Program	One Week			
 Mr. Sandeep Ushkewar Coordinator	 Dr. Vishal Moyal Department Coordinator	 Dr. Nilesh Salunke Principal & Patron		

Principal

SVKM's Institute of Technology, Dhule

Attached:-

1. Details of the Event
2. Event Memories/Pictures
3. List of Participants
4. Sample Certificate



1. Details of the Event

Name of Program: FDP on “Power Quality Problems and due Solutions”.

Objectives: To train researchers with follow content:

1. Waveform Distortions and Power Quality Issues due to Grid Connected Converters.
2. Signal Processing Techniques for Power Quality Studies
3. Photovoltaic System Operation as DSTATCOM for power Quality Improvement Employing Active Current Control
4. Enhancement in the Power Quality using FACTS
5. FACTS Optimal Placement using GA in MATLAB
6. Harmonic Elimination in A MPPT Based Solar Powered Cascade Multilevel Inverter
7. Lower Order Harmonic Elimination by using Multi Pulse AC to DC Converter using MATLAB
8. Techniques to Mitigate harmonics due to power electronics circuits
9. Prospective of Power Quality Improvement studies in Typhoon HIL
10. Prospective of Power Quality Improvement studies in Typhoon HIL- DVR Example
11. Power Quality Improvements in Charging Stations
12. Power Quality Measurements using Fluke
13. Machine-learning methods applied to Power Quality Problems

Dates and duration: 30/01/2023 to 03/02/2023 (One Week)

Event Coordinator: Mr. Sandeep Ushkewar

Convener: Dr. Vishal Moyal.

Patron: Dr. Nilesh Salunke

Organizing Team: Mr. Sandeep Ushkewar, Mr. Gaurav Patil, Dr. Namra Joshi, Mr. Jagdish More, Ms. Farha Naz, Mr. T. N. Shubham, Mr. Shahid Akhtar, Mr. Rahul Thakur, Mr. Jayesh Patil.

Participants: Faculty from Electrical Engineering Department (Only from SVKM’s IOT, Dhule)

Name and details of the speakers:

1. Dr. Shimi S.L, Assistant Professor, NITTTR Chandigarh
2. Pankaj Achlerkar (PhD, IIT, Delhi), System Design Engineer, GE , Noida
3. Dr. Nishant Kumar, Assistant Professor, Indian Institute of Technology Jodhpur
4. Mr. Rohit Kumar, PhD Student, IIT Delhi
5. Dr Lini Mathew, Professor, NITTTR Chandigarh
6. Mrs. Anjali Bhandakkar, Research Scholar, NITTTR Chandigarh
7. Dr. Ravi Teja, Assistant Professor, IIT Ropar
8. Shailendra Kumar, NIT, Bhopal

2. Event Poster

COURSE CONTENT

- WAVEFORM DISTORTIONS AND POWER QUALITY ISSUES DUE TO GRID CONNECTED CONVERTERS - **DR. SHIMI S.L., NITTTR, CHANDIGARH**
- DIP CHARACTERISTICS AND EQUIPMENT IMPACT- **ROGER ALVES DE OLIVEIRA, LTU, SWEDEN**
- TECHNIQUES TO MITIGATE HARMONICS DUE TO POWER ELECTRONICS CIRCUITS - **DR. RAVI TEJA, IIT, ROPAR**
- LOWER ORDER HARMONIC ELIMINATION BY USING MULTI PULSE AC TO DC CONVERTER USING MATLAB - **ROHIT KUMAR, IIT, DELHI**
- ENHANCEMENT IN THE POWER QUALITY USING FACTS - **PROF. LINI MATHEW, NITTTR, CHANDIGARH**
- FACTS OPTIMAL PLACEMENT USING GA IN MATLAB - **DR. ANJALI BHANDAKKAR**
- REACTIVE POWER MANAGEMENT AND ACTIVE FILTERS- **EXPERT TYPHOON HIL**
- POWER QUALITY IMPROVEMENTS IN CHARGING STATIONS - **DR SHAILENDRA KUMAR, NIT, BHOPAL**
- MACHINE-LEARNING METHODS APPLIED TO POWER QUALITY PROBLEMS - **DR. SHIMI, NITTTR, CHANDIGARH**
- TOOLS SUCH AS MATLAB AND POWER QUALITY ANALYSER FOR POWER QUALITY RESEARCH - **EXPERT FLUKE**



ONLINE STC ON POWER QUALITY PROBLEMS AND SOLUTIONS

Organized by
NITTTR, Chandigarh
Nodal Center
SVKM's Institute of Technology,
Dhule
30TH JAN TO 3TH FEB, 2023,

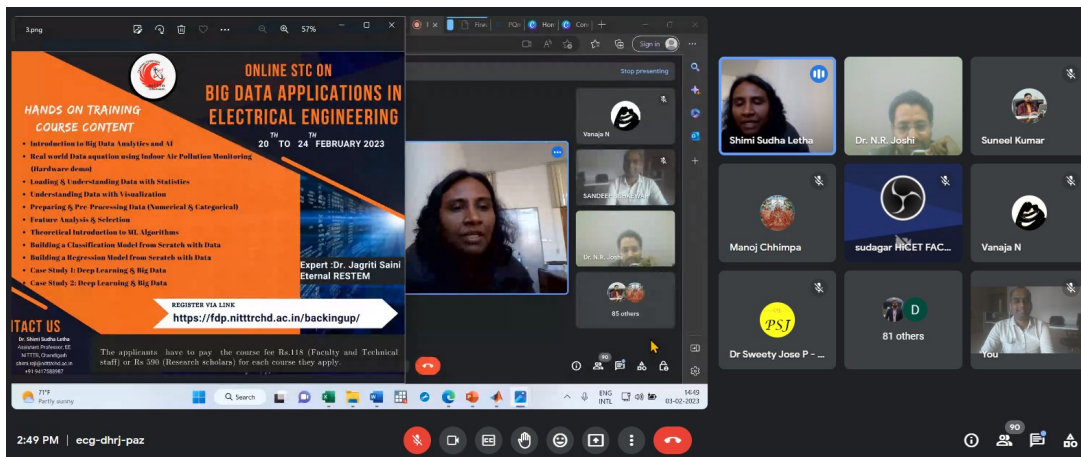
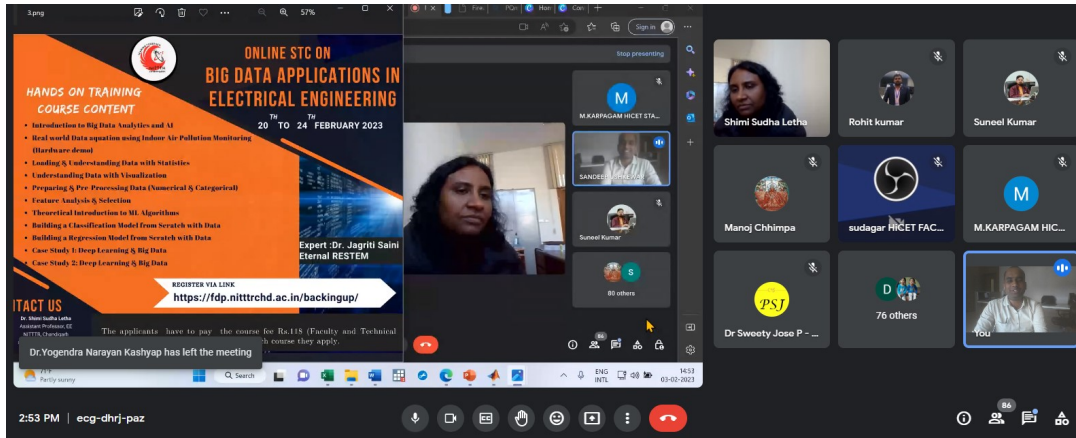
TO KNOW MORE JOIN US ONLINE

Register via link
<https://fdp.nitttrchd.ac.in/backingup/>

FOR DETAILS , CONTACT

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Mobile: 9970045518
E-Mail: Sandeep.Ushkewar@svkm.ac.in

3. Event Memories/ Pictures



3. List of Participants

Attendance

Name of the Course: Power Quality Problems and Solutions (O. PLAN No. ICT 162)


Dates: 30.01.2023 to 03.02.2023

Venue (Nodal Centre) : SVKM's Institute of Technology, Dhule, Maharashtra

Sr. No.	Name of the Participant	Name of the Institute	30-01-2023		31-01-2023		01-02-2023		02-02-2023		03-02-2023	
			09.30 am - 11.00 am	11.30am - 1.00pm	09.30 am - 11.00 am	11.30am - 1.00pm	09.30 am - 11.00 am	11.30am - 1.00pm	09.30 am - 11.00 am	11.30am - 1.00pm	09.30 am - 11.00 am	11.30am - 1.00pm
1	Akshay Bharat Jain	SVKM's Institute of Technology, Dhule	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
2	Ami Brahmabhatt	VJTI, Matunga, Mumbai.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3	Atul Abhiman Khairnar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
4	Dr Nilesh Salunke	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
5	Dr. Manoj Rambhan Sonawane	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
6	Farha Naz	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7	Gaurav Baludas Patil	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8	Jagdish Laxman More	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9	Jayesh Nana Patil	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
10	Krupal Bapu Kanner	Nikam Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
11	M. Anikash Kumar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
12	Madhuri Vishnu Patil	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
13	Namra Joshi	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
14	Nilesh Suresh Pawar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
15	Niteen Gangadhar Dhutraj	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
16	Pankaj Navanital Bhisar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
17	Pragati Gupta	VJTI, Matunga, Mumbai.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
18	Pragya Jan	Atharva College of Engineering, Mumbai.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
19	Pratik Vilas Deore	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
20	Rahul Manohar Thakur	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
21	Rinko Mahesh Sharma	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
22	Rubi Mandral	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
23	Sachin Dilip Nerkar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
24	Sandeep Sunil Ushkewar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
25	Sangeeta Kotecha	Atharva College of Engineering, Mumbai.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
26	Satish Ramesh Patil	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
27	Shahid Akhtar Iqbal Ahmed	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
28	Suhias Manohar Sheembekar	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
29	T M Shubham	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
30	Vishal Moyal	SVKM's Institute of Technology, Dhule.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

4. Sample Certificate

Certificate No: ICT-23135/23




**National Institute of
Technical Teachers Training and Research
Chandigarh**

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

Certificate

This is to certify that

M. ANKUSH KUMAR



**SVKMS INSTITUTE OF TECHNOLOGY, DHULE
MAHARASHTRA**

Participated in the AICTE Recognized Faculty Development Programme

on

Power Quality Problems and Solutions

Conducted by


Electrical Engineering Department

from

30/01/2023 to 03/02/2023 (One Week)

at

SVKMs Institute of Technology, Dhule, Maharashtra



Shivani S.L.
Coordinator

[Signature]
Director