



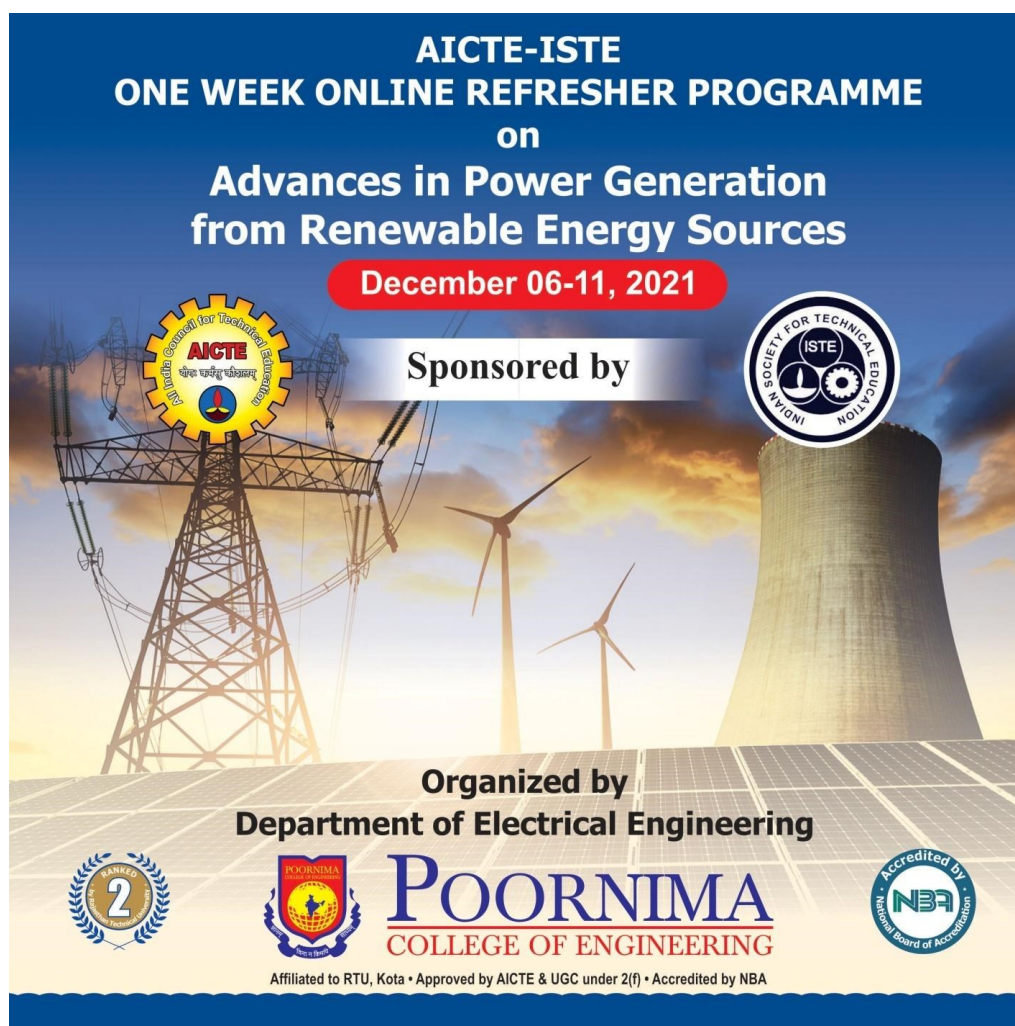
# POORNIMA

## COLLEGE OF ENGINEERING

Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

### A REPORT ON REFRESHER PROGRAMME

- ♦ **TITLE AND DURATION:** “Advances in Power Generation from Renewable Energy Sources” on December 06-11, 2021.
- ♦ **SPONSORS & SUPPORTERS:** AICTE & ISTE
- ♦ **ORGANIZER(S):** Department of Electrical Engineering, Poornima College of Engineering, Jaipur.
- ♦ **FLYER / POSTER:**



  
**Dr. Mahesh Bunde**  
B.E., M.E., Ph.D.  
Director  
Poornima College of Engineering  
ISI-0, RICO Institutional Area  
Sitapura, JAIPUR

## ◆ BROCHURE:

### SPEAKERS

**Dr. D.P. Kothari**  
Honorary Adjunct Professor, VNIT, Nagpur,  
Director Research, WCEM, Nagpur

**Dr. Bhim Singh**  
Professor, IIT, Delhi

**Dr. Rajeshwar Prasad Saini**  
Professor, IIT, Roorkee

**Dr. H. D. Mathur**  
Professor, BITS, Pilani

**Dr. Dheeraj Joshi**  
Professor, DTU, Delhi

**Dr. Ashish Shrivastava**  
Professor, Manipal University, Jaipur

**Dr. Rahul Agrawal**  
Professor, Sandip University, Nashik

**Dr. Manoj Rathi**  
Founder, Research Centre for Sustainable  
Solutions (RCS) Pvt. Ltd., Energies, Nashik

**Dr. Yogesh Sonawane**  
Global Sustainability and Energy Manager  
(Asia Pacific), CBRE

**Dr. Kailash Chand Sharma**  
Associate Professor, NIT, Jalandhar, Punjab

**Dr. Tapan Kumar Gandhi**  
Associate Professor, IIT, Delhi

**Dr. Neeraj Kumar Garg**  
Associate Professor, GEC, Jhalawar

**Dr. Prakash Kumar**  
Assistant Professor, Anitya University, Patna, Bihar

**Dr. Seema Agrawal**  
Assistant Professor, RTU, Kota

**Dr. Vinod Yadav**  
Assistant Professor, CTAE, Udaipur

### PATRON

**Dr. Mahesh Bunde**  
Principal & Director  
Poornima College of Engineering, Jaipur

### PROGRAM COORDINATOR

**Dr. Pravin Sonwane**  
Professor & Head, Department of EE, PCE

### CO-COORDINATOR

<b>Dr. Pankaj Gakhar</b> Assistant Professor EE, PCE	<b>Dr. Gaurav Jain</b> Assistant Professor EE, PCE
--	--

### PCE ORGANIZING COMMITTEE

<b>Dr. Monika Vardia</b> Asso. Professor, EE	<b>Dr. Jyoti Shukla</b> Asso. Professor, EE
<b>Mr. Mayank Sharma</b> Asst. Professor, EE	<b>Mr. Pankaj Verma</b> Asst. Professor, EE
<b>Mr. Ajit Singh Rajawat</b> Asst. Professor, EE	

### CONTACT FOR FURTHER INFORMATION

**Dr. Pravin Sonwane**  
Professor & Head, Department of EE, PCE  
☎ : +91-8805868462 • ✉ : pravin.sonwane@poornima.org

### AICTE-ISTE ONE WEEK ONLINE REFRESHER PROGRAMME on Advances in Power Generation from Renewable Energy Sources

**December 06-11, 2021**

Sponsored by

Organized by  
**Department of  
Electrical Engineering**

**POORNIMA**  
COLLEGE OF ENGINEERING

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NBA

### THE INSTITUTION

Poornima College of Engineering (PCE), established as a brand of Technical Education in the year 2000, has its own glorious legacy of leading the young engineers to the mammoth sky of success. Its accomplishments forecast its journey through the hardships and its triumph over them one after another. PCE left no stone unturned since its establishment in turning the glorious vision into unbelievable reality providing the platform for knowledge and research and their practical implementations in different engineering professional prospects. Glorious glimpses of PCE:

- Highly recognized and renowned affiliated technical institution all over Rajasthan with built up area more than 3.5 lacs square feet
- Affiliated to RTU, Kota & approved by AICTE, New Delhi
- The most preferred NBA Accredited Engineering College with running of specializations of Engineering at UG Level (CSE, ECE, EE, ME, IT, CIV) and two at PG level (CS & VLSI)
- The only institution permitted by RTU to admit FN/PIO/Gulf students & designated as centre of excellence by IBM
- An excellent institution building its rapport in all sectors of education, research and development

### THE DEPARTMENT

The Journey of Department of Electrical Engineering was started in year 2000 with Poornima College of Engineering, Jaipur. National Board of Accreditation (NBA) accredited the undergraduate programme of the department of Electrical Engineering in the year 2009 and 2017 for three years & in 2020 for one year. The intake capacity of the programme in the department is of 510 students across four years. We are providing all the amenities of infrastructure related to knowledge, research, experiments and training of multiple professions. The department has organized various workshops, seminars, expert lectures in every session such as workshop on PLC SCADA, MATLAB, Renewable Energy, Industrial Automation, etc. The department has been taking initiatives for versatile enhancement of the students through technical, cultural and sports fests since the establishment. Most of our final year students have been placed in Infosys, Capgemini India Ltd., FACE, Gram Power, Adani Power, KSTPS, Pinnacle Infotech solutions, etc.

### ABOUT CENTRE OF EXCELLENCE AI & BIG DATA

The creation of Centre of Excellence aims at building the workforce where each participant will learn about the principles of Artificial Intelligence, Machine Learning, AI programming using Python, Artificial Neural Network, Natural Language Processing with Lab, Computer Vision, Deep Learning, Intelligent Process Automation and many more. Some features are as following:

- Semester long internships at industry partners
- Online certification program
- Industry academia interactions on a regular basis
- Faculty Training and certification courses
- Student projects with beyond syllabus concept-project every semester.
- Faculty members pursuing research projects, sponsored research and other works in AI & Big Data utilizing above resources.
- Conducting Workshops, Seminars, FDPs, Training for external students and faculty members in AI & Big Data.

### AICTE

AICTE All India Council for Technical Education (AICTE) was setup in November 1945 as a national level Apex Advisory Body to conduct survey on the facilities on technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in the National Policy of Education (1986), AICTE be vested with statutory authority for planning, formulation and maintenance of standards and norms, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country.

### ISTE

The Indian Society for Technical Education (ISTE) is the leading National Professional Non-Profit. making Society for the Technical Education System in our country with the motto of Career Development of Teachers and Personality Development of Students and overall development of our Technical Education System. The major objective of the ISTE are:

- Providing quality training programmes to teachers and administrators of technical institutions to update their knowledge and skills in their fields of activity.
- To assist and contribute in the production and development of top quality professional engineers and technicians needed by the industry and other organizations.
- Providing guidance and training to students to develop better learning skills and personality.

### ABOUT THE PROGRAM

This multidisciplinary online faculty development program is being organized as an effort to inculcate scientific temper and to popularize the benefits of scientific knowledge and its practical appropriation among the faculty members, general public and scientific institutions.

### COURSE OBJECTIVE

- To equip participants with skills and knowledge in the field of Renewable Energy.
- To educate participants to train the students so as to create interest in current trends in solar and wind Energy.
- To familiarize participants with the practical aspects of power generation through renewable energy sources.

### REGISTRATION FEE

There is no registration fee for the program. **Preference will be given to ISTE members.**

### RESOURCE PERSONS

Resource Persons are experts from IITs/ NITs/ Industries/ Universities and Institutes of repute.

### ELIGIBILITY

The program is open to all members of AICTE/UGC affiliated institutes/Universities i.e. Faculty Members, Research Scholars.

### SELECTION AND CERTIFICATION CRITERIA

Selection will be done based on first-cum-first-serve basis and the confirmed candidate will be notified on receipt of registration form. Attendance of 80% and score of minimum 60% marks in the test/ quiz is compulsory for certification.

### HOW TO APPLY

The course is free of cost for eligible candidates. The participants have to submit duly filled registration form which is available on the link provided below.  
<https://tinyurl.com/2whm9735>

### GUIDELINES

Coordinator decision will be final regarding the selection of participants. The certificates shall be issued to those participants who are registered and attended the program using the link <https://tinyurl.com/mwbak5xw> with minimum 80% attendance and score minimum 60% marks in the test/ quiz.


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 B.E., M.E., Ph.D.  
 Director  
 Poornima College of Engineering  
 ISI-6, RIICO Institutional Area  
 Sitapura, JAIPUR



♦ PROGRAM SCHEDULE:

Programme Outline	
Monday, Day 1: 06December, 2021	
09.30AM – 09.50 AM	<p style="text-align: center;"><b><u>Inaugural Function</u></b></p> <ul style="list-style-type: none"> <li>• Prof. (Dr.)Mahesh Bunde, Director &amp; Principal, Poornima College of Engineering, Jaipur</li> <li>• Ar. Rahul Singhi, Director,Poornima Group, Jaipur</li> <li>• Er. Pankaj Dhemla, Vice-Principal, Poornima College of Engineering, Jaipur</li> <li>• Prof. (Dr.)Rajeshwar Prasad Saini, Chief-Guest Department of Hydro &amp; Renewable Energy, IIT Roorkee</li> <li>• Prof. (Dr.) Pravin Sonwane, HOD, Department of Electrical Engineering, PCE, Jaipur</li> </ul>
09.50 AM - 11.00AM	<p style="text-align: center;"><b><u>Session-1</u></b></p> <p><b>Topic:</b>Renewable energy: Power generation and importance in India</p> <p><b>Resource Person:</b>Prof. (Dr.) Rajeshwar Prasad Saini, Professor, Department of Hydro &amp; Renewable Energy, IIT Roorkee</p>
11.00 AM - 12.30 PM	<p style="text-align: center;"><b><u>Session-2</u></b></p> <p><b>Topic:</b>Energy and environment problems facing the third world and their probable solutions through renewable energy sources for sustainable development and poverty alleviation</p> <p><b>Resource Person:</b>Prof. (Dr.). D.P.Kothari, Honorary Adjunct Professor, VNIT, Nagpur And Director Research, WCEM, Nagpur</p>
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p style="text-align: center;"><b><u>Session-3</u></b></p> <p><b>Topic:</b>Power converters and their simulation for wind and solar power applications</p> <p><b>Resource Person:</b>Dr. Vinod Yadav, Assistant Professor, CTAE, Udaipur</p>

Programme Outline	
Tuesday, Day 2: 07December, 2021	
09.00 AM – 10.30 AM	<p style="text-align: center;"><b><u>Session-4</u></b></p> <p><b>Topic:</b>Solar Photovoltaic Power Generation</p> <p><b>Resource Person:</b>Prof. (Dr.)Bhim Singh, Professor, Department of Electrical Engineering, IIT Delhi</p>
10.30 AM - 11.00 AM	<b>BREAK</b>
11.00 AM - 12.30 PM	<p style="text-align: center;"><b><u>Session-5</u></b></p> <p><b>Topic:</b>A New Paradigm Of Power Generation And Load In Future Electric Grid</p> <p><b>Resource Person:</b>Dr. H. D. Mathur, Professor, Department of Electrical Engineering,BITS PILANI</p>

  
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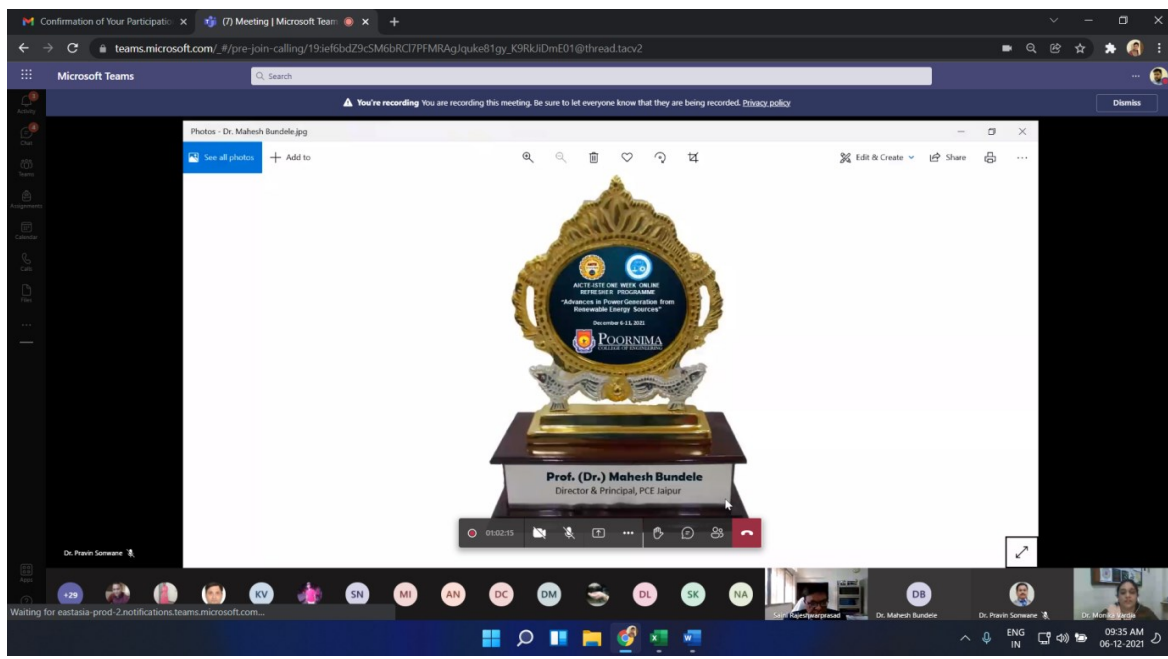
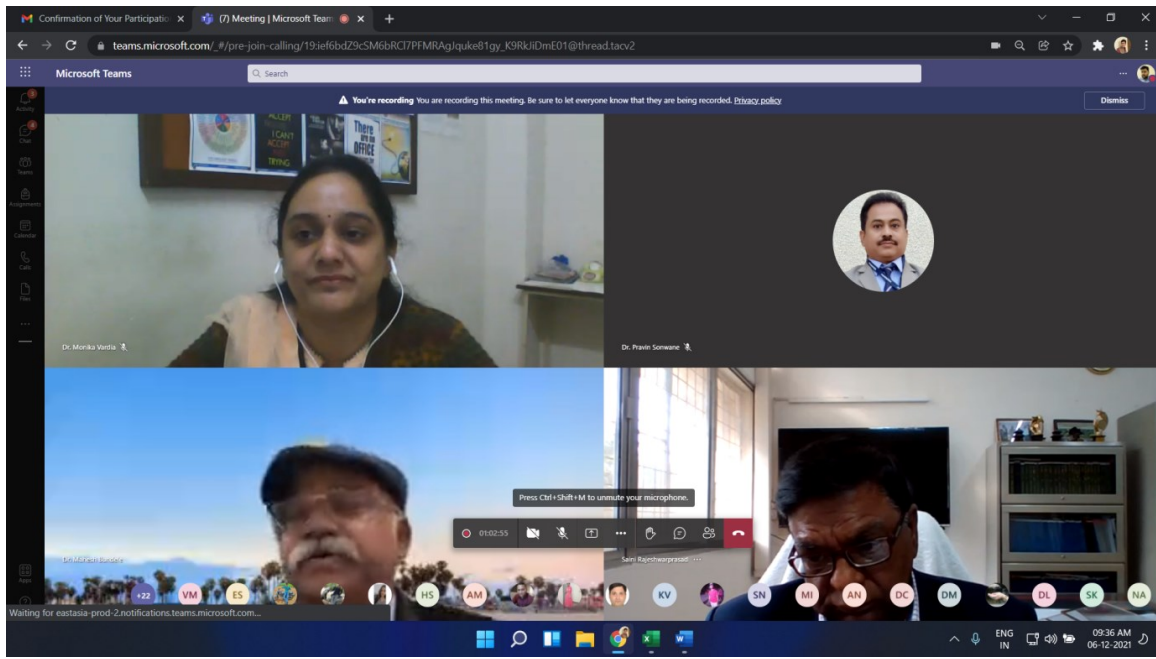
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p align="center"><b><u>Session-6</u></b></p> <p><b>Topic:</b>Fast Frequency Response in Future Renewable Dominated Power System</p> <p><b>Resource Person:</b>Dr. K.C.Sharma, Assistant Professor, Department of Electrical Engineering,NIT, Jalandhar, Punjab</p>
<b>Programme Outline</b>	
<b>Wednesday, Day 3: 08December, 2021</b>	
09.00 AM – 10.30 AM	<p align="center"><b><u>Session-7</u></b></p> <p><b>Topic:</b>Recent Challenges Of Renewable Energy In Smart Grid System</p> <p><b>Resource Person:</b>Dr. Neeraj Kumar Garg, Associate Professor, Department of Electrical Engineering,GEC,Jhalawar</p>
10.30 AM - 11.00 AM	<b>BREAK</b>
11.00 AM - 12.30 PM	<p align="center"><b><u>Session-8</u></b></p> <p><b>Topic:</b>Analysis and experimental investigations of self-excited induction generator under different operation conditions.</p> <p><b>Resource Person:</b>Prof. (Dr.) Dheeraj Joshi, Professor, Delhi Technical University, Delhi</p>
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p align="center"><b><u>Session-9</u></b></p> <p><b>Topic:</b>Wind power Systems-Current Trends and Challenges</p> <p><b>Resource Person:</b>Prof. (Dr.) Ashish Shrivastava, Professor, Department Of Electrical Engineering, Manipal University, Jaipur</p>
<b>Programme Outline</b>	
<b>Thursday, Day 4: 09December, 2021</b>	
09.00 AM – 10.30 AM	<p align="center"><b><u>Session-10</u></b></p> <p><b>Topic:</b>An Overview Of Solar PV System Software</p> <p><b>Resource Person:</b>Mr. Radhacharan Chandragiri, Assistant Professor, Dept of Electrical Engineering, JNTUH College of Engineering, Telangana, Jaipur</p>
10.30 AM - 11.00 AM	<b>BREAK</b>
11.00 AM - 12.30 PM	<p align="center"><b><u>Session-11</u></b></p> <p><b>Topic:</b> Optimization Techniques in Renewable Energy Power Source</p> <p><b>Resource Person:</b> Dr. Rahul Agrawal, Professor, Electrical Engineering, Sandip University, Nashik</p>
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p align="center"><b><u>Session-12</u></b></p> <p><b>Topic:</b> Application of ANN Controller In Solar Energy Generation System</p> <p><b>Resource Person:</b>Dr.Seema Agrawal, Assistant Professor, Electrical Engineering, RTU, Kota</p>



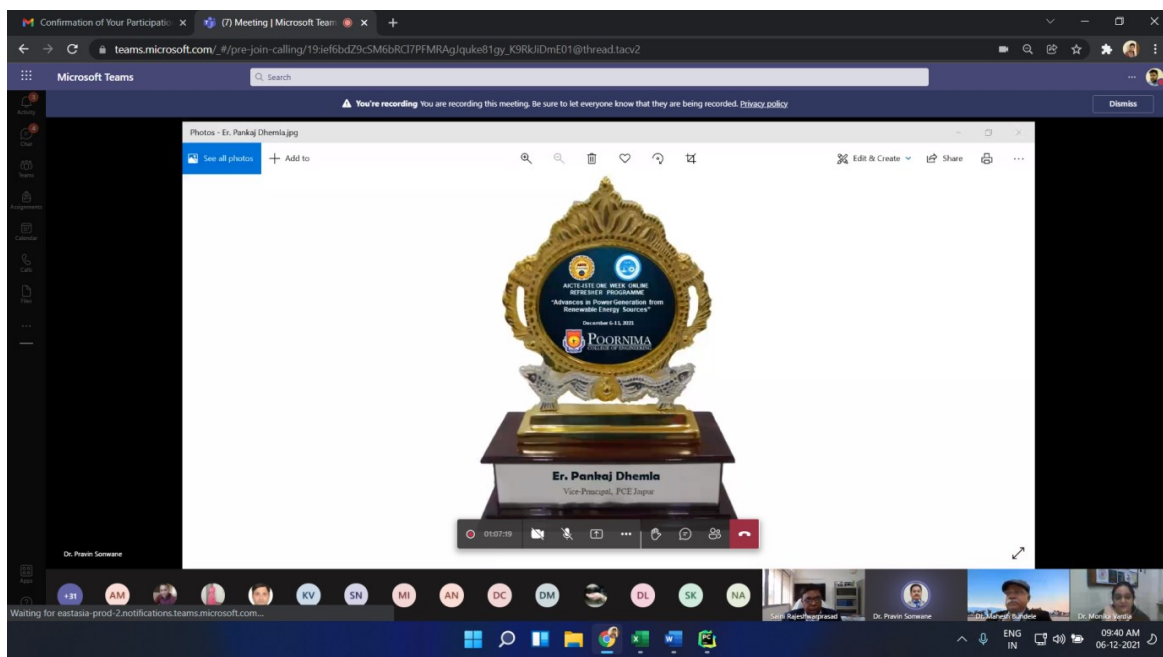
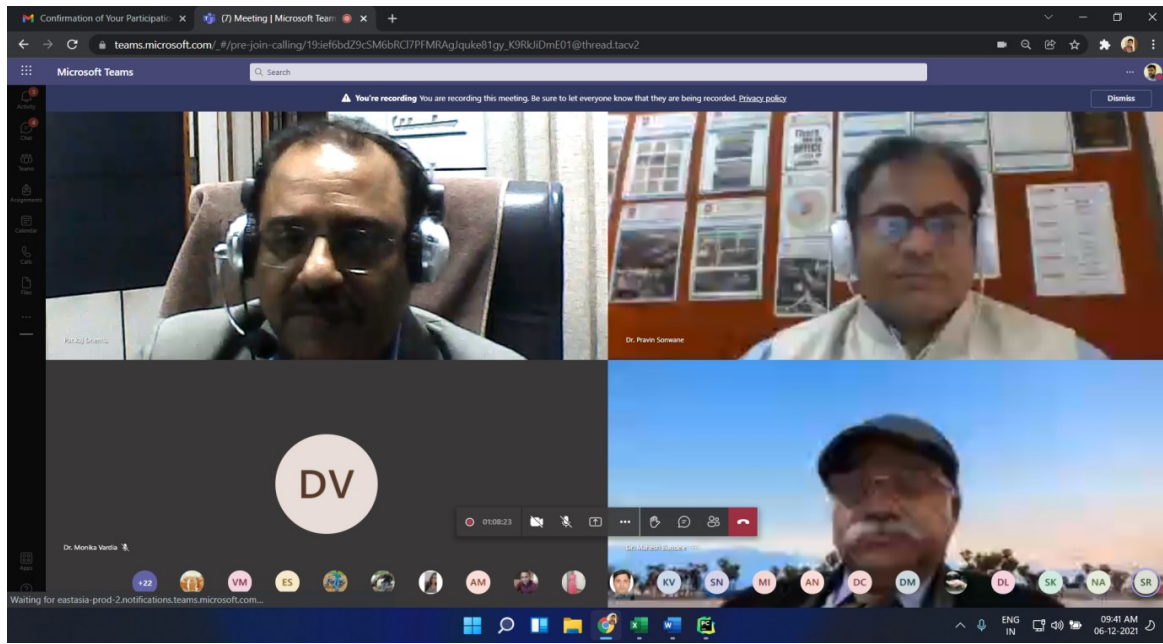
Programme Outline	
<b>Friday, Day 5: 10December, 2021</b>	
09.00 AM – 10.30 AM	<p align="center"><b><u>Session-13</u></b></p> <p><b>Topic:</b>Decentralized Autonomous Hybrid Renewable Power Generation Tools</p> <p><b>Resource Person:</b>Dr. Prakash Kumar, Assistant Professor, Dept of Electrical &amp; Electronics Engineering, AMITY Patna, Bihar</p>
10.30 AM - 11.00 AM	<b>BREAK</b>
11.00 AM - 12.30 PM	<p align="center"><b><u>Session-14</u></b></p> <p><b>Topic:</b>Microgrid Systems for Renewable Energy</p> <p><b>Resource Person:</b>Dr. Manoj Rathi, founder, Research Centre For Sustainable Solutions (RCSS) Pvt. Ltd., Energies, Nashik</p>
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p align="center"><b><u>Session-15</u></b></p> <p><b>Topic:</b>Artificial Intelligence Techniques in Renewable Energy Power</p> <p><b>Resource Person:</b>Dr.Tapan Kumar Gandhi, Associate Professor, Dept. Of Electrical Engineering, IIT, Delhi,</p>
Programme Outline	
<b>Saturday, Day 6: 11December, 2021</b>	
09.00 AM – 10.30 AM	<p align="center"><b><u>Session-16</u></b></p> <p><b>Topic:</b> Implementation of Renewable energy sources in power system network</p> <p><b>Resource Person:</b>Dr. Mukul Dixit, Assistant Professor, Roorkee College of Engineering, Roorkee</p>
10.30 AM - 11.00 AM	<b>BREAK</b>
11.00 AM - 12.30 PM	<p align="center"><b><u>Session-17</u></b></p> <p><b>Topic:</b>Stress Management</p> <p><b>Resource Person:</b>Mr. Chirag Patil,Director, Art of Living.</p>
12.30 PM - 01.00 PM	<b>BREAK</b>
01.00 PM - 02.30 PM	<p align="center"><b><u>Session-18</u></b></p> <p><b>Topic:</b>AICTE-ISTE initiatives followed by Closing Session</p> <p><b>Resource Person:</b>ISTE PROFESSIONAL</p>

## ◆ GLIMPSES OF THE SESSION:

### Inauguration



## Poornima College of Engineering - Activity Report - 2021-22

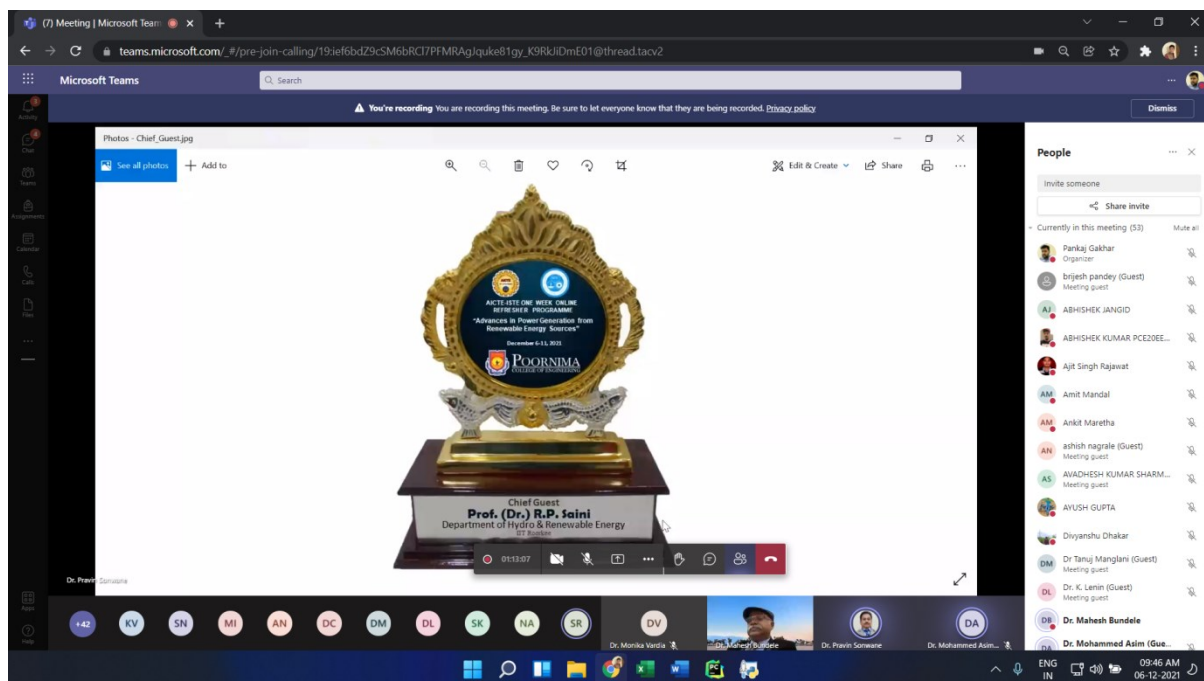
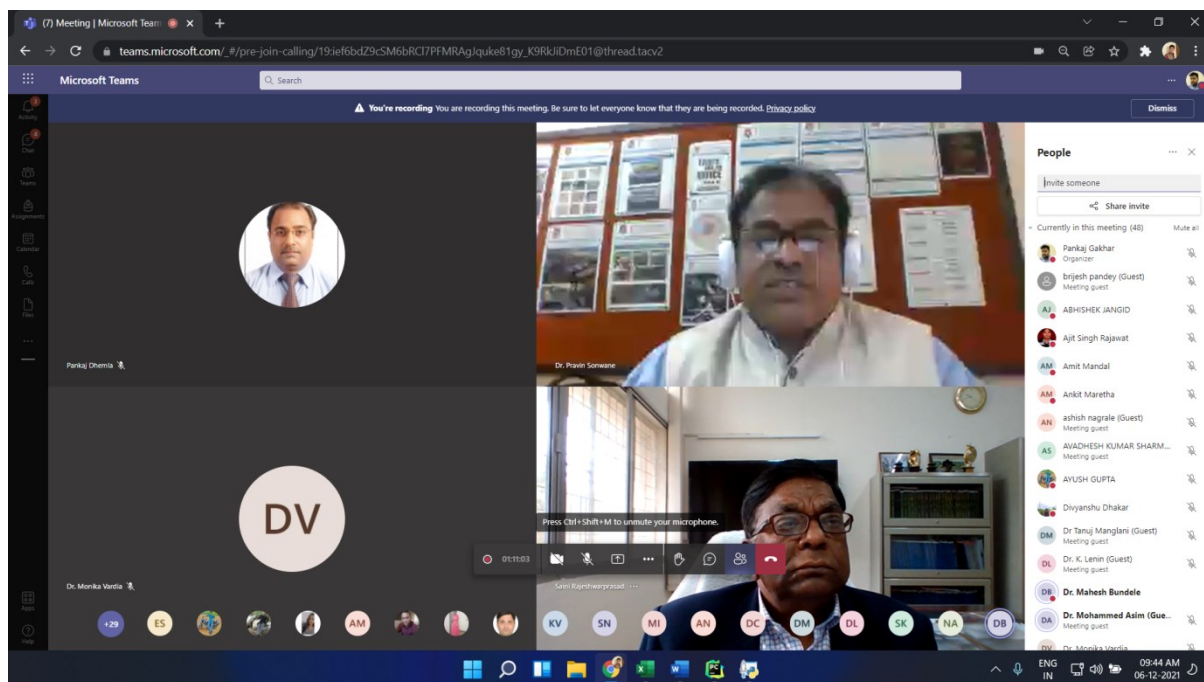


  
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ISI-6, PILCO Institutional Area  
Sisupura, JAIPUR



## Session-1

Expert Details		
1.	Prof. Rajeshwar Prasad Saini	Professor, Alternate Hydro Energy Centre, Indian Institute of Technology, Roorkee-247 667
Topic		Renewable energy: Power generation and importance in India



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## Poornima College of Engineering - Activity Report - 2021-22

Microsoft Teams Meeting interface showing a presentation slide titled "INDIAN INSTITUTE OF TECHNOLOGY ROORKEE". The slide content includes:

**AICTE-ISTE ONE WEEK ONLINE REFRESHER PROGRAMME**  
ON  
**Advances in Power Generation from Renewable Energy Sources**  
at  
Department of Electrical Engineering, Poornima College of Engineering, Jaipur  
Dec. 6<sup>th</sup> – 11<sup>th</sup>, 2021  
**Renewable energy: Power generation and importance in India**  
By  
**Dr. R. P. SAINI**  
Professor & MNRE Chair Professor (Renewable Energy)  
Department of Hydro and Renewable Energy  
Indian Institute of Technology Roorkee  
Roorkee-247667  
E-mail : [rp.saini@iitr.ac.in](mailto:rp.saini@iitr.ac.in), [saini.rajeshwer@gmail.com](mailto:saini.rajeshwer@gmail.com)  
(DEC. 6<sup>th</sup>, 2021)

The slide features a background image of the Indian Institute of Technology Roorkee building. The Microsoft Teams interface shows a meeting in progress with participants listed at the bottom.

Microsoft Teams Meeting interface showing a presentation slide titled "RENEWABLE ENERGY SOURCES". The slide content includes:

**Sun is the prime source of all renewable energy**

The slide features a diagram illustrating the flow of solar energy and its conversion into various renewable energy sources. The diagram shows the Sun emitting short wave radiation, which is either directly converted to heat in air, earth, and oceans (47%), or reflected (30%). The reflected radiation is further categorized into direct reflection (30%) and indirect reflection (10%). The indirect reflection is further categorized into hydrological cycle (evaporation, precipitation) (23%), photosynthesis (1%), and winds, waves, convection and currents (37%).

The diagram also shows the conversion of solar energy into wind energy (winds, waves, convection and currents) and hydro energy (hydrological cycle). The diagram includes a wind turbine and a hydroelectric dam.

The Microsoft Teams interface shows a meeting in progress with participants listed at the bottom.

  
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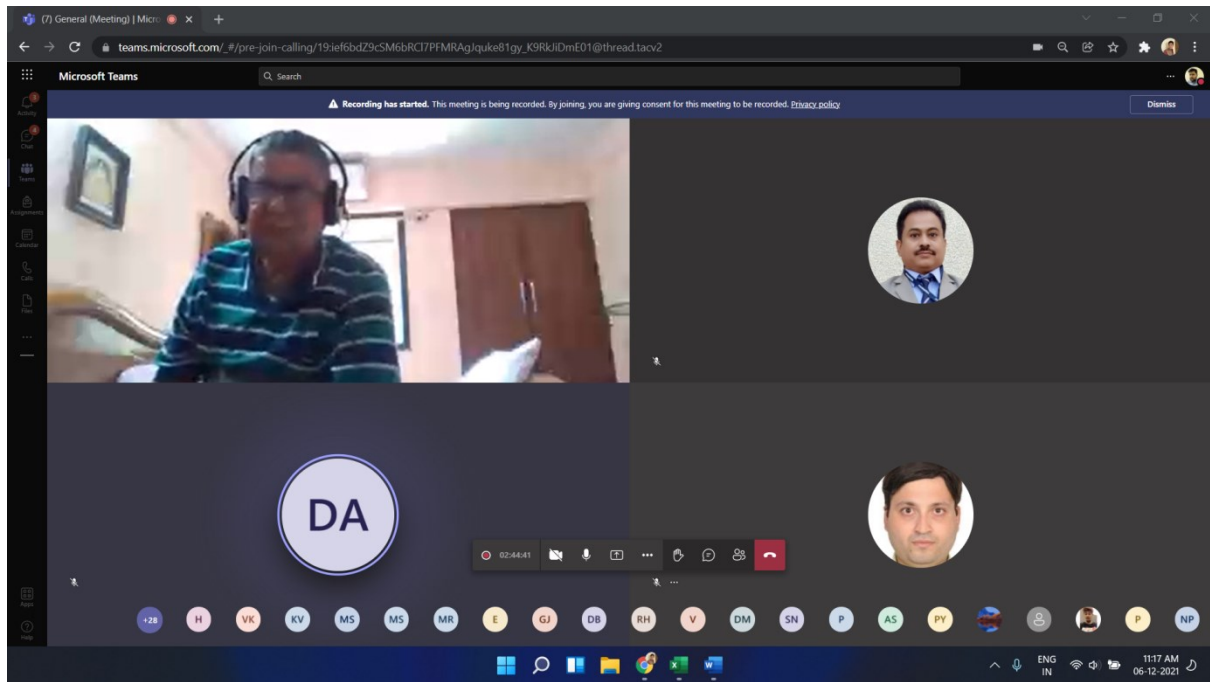
## Session-2

Expert Details		
2.	Prof. (Dr.). D.P.Kothari	Dr. D. P. Kothari obtained his BE (Electrical) in 1967, ME(Power Systems) in 1969 and Ph.D. in 1975 from BITS, Pilani, Rajasthan. From 1969 to 1977, he was involved in teaching and development of several courses at BITS Pilani. Earlier Dr. Kothari served as Vice Chancellor, VIT, Vellore, Director in-charge and Deputy Director (Administration) as well as Head in the Centre of Energy Studies at Indian Institute of Technology, Delhi and as Principal, VRCE, Nagpur. He was visiting professor at the Royal Melbourne Institute of Technology, Melbourne, Australia, during 1982-83 and 1989, for two years. He was also NSF Fellow at Perdue University, USA in 1992. He also taught at Melbourne University Australia for one semester in 1989 Director research, S.B. Jain Institute of Technology, Management & Research, Nagpur.
Topic		Energy and environment problems facing the third world and their probable solutions through renewable energy sources for sustainable development and poverty alleviation





## Poornima College of Engineering - Activity Report - 2021-22



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### Block diagram of a power processor

Raw Electrical Power  $P_{in}$  → Converter → Output Electrical Power in the Form Required by Load  $P_{out}$

Control Signals

Control Circuit or Triggering Circuit

Feedforward

Reference

Feedback

- Converter has power switching semiconductor devices and energy storing elements like inductors and capacitors.
- Resistive elements are avoided in converters because they cause power loss and reduce efficiency.
- Controller switches on/off the switching devices present in the converter.

Press Ctrl + Shift + M to unmute your microphone.

04:43:11

6 December 2021

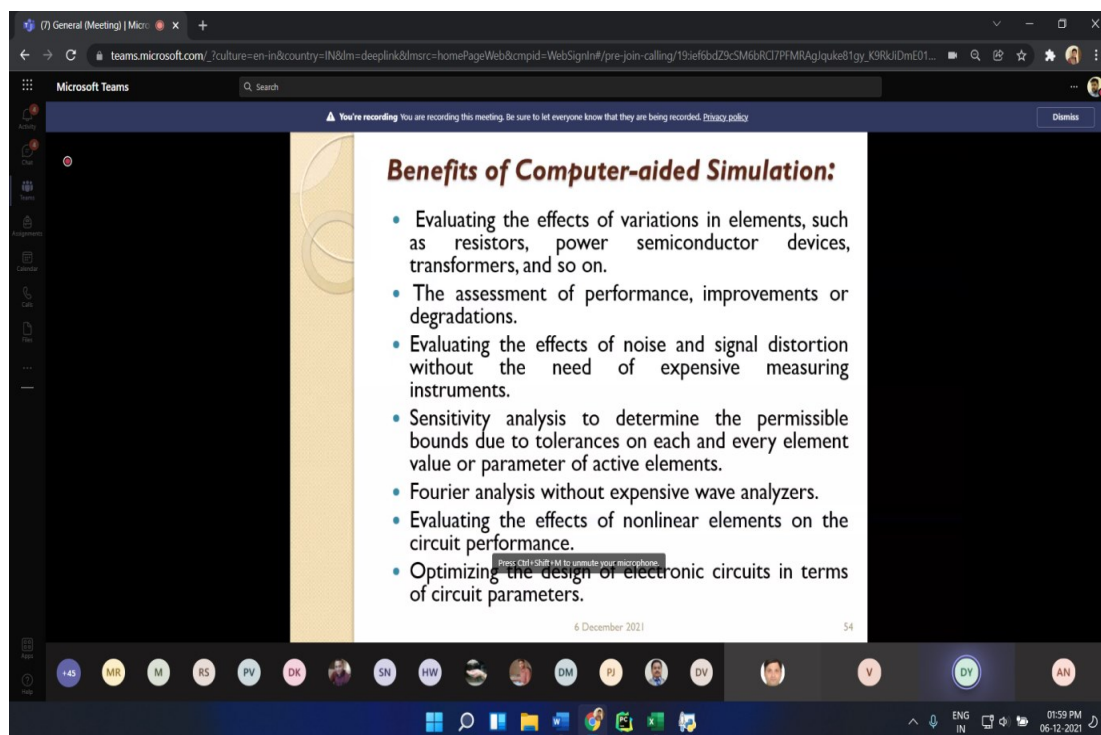
Dr. Monika Verma

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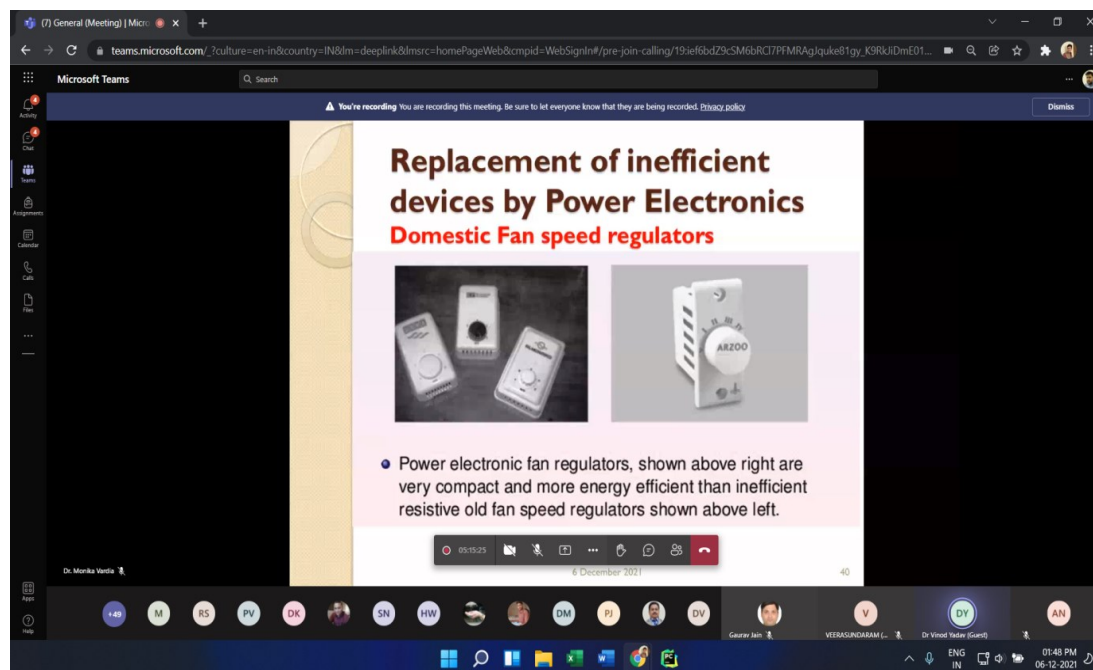
  
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Director  
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151-0, PILCO Institutional Area  
Sisupura, JAIPUR

### Session-3

Expert Details		
3.	Dr.Vinod Yadav	<p>Vinod Kumar Yadav received the Bachelor of Electrical Engineering degree (2002) from Maharana Pratap University of Ag &amp; Technology, Udaipur; M.Tech in Power Electronics (2004) from VIT Vellore, and Ph.D degree (2014) from College of Technology &amp; Engineering, Udaipur, India. Currently, he is working as faculty and Chairman, Information &amp; Placement bureau in the College of Technology and Engineering, MPUAT, India. He has received prestigious “Career Award for Young Teachers” from AICTE, New Delhi in the year 2013, along with “Gold Medal Award” with certificate of merit during PhD programme in 2014. He has more than 16 years of teaching experience. He has published more than 85 research paper in interational/National journals including IEEE Transactions along with 6 books in field of power electronics. He has 2 patents (one national and one international). His area of interest is Power Electronics, HVDC, Advanced Electric Drives; Power Converter based Wind Generation System.</p>
Topic		Power converters and their simulation for wind and solar power applications



  
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#### Session-4

Expert Details		
4.	Prof. (Dr.) Bhim Singh	<p>Prof. Bhim Singh has received his B.E. (Electrical) from the University of Roorkee, India, in 1977 and his M.Tech. IN (Power Apparatus &amp; Systems) and Ph.D. from the Indian Institute of Technology Delhi, India. In 1983, he joined the Department of Electrical Engineering, University of Roorkee (Now IIT Roorkee), as a Lecturer. He became a Reader. Then he joined the Department of Electrical Engineering, IIT Delhi, India, as an Assistant Professor. where he has become an Associate Professor and a Professor. He has been ABB Chair Professor from September 2007 to September 2012. He has been Head of the Department of Electrical Engineering at IIT Delhi FOR 2 years. He has been the Dean, Academics at IIT Delhi. He has been JC Bose Fellow of DST, Government of India.</p> <p>Prof. Singh has guided 100 Ph.D. dissertations, and 171 M.E./M.Tech./M.S.(R) theses. He has been filed 87 patents. He has executed more than eighty sponsored and consultancy projects. He has co-authored a text book on power quality: Power Quality Problems and Mitigation Techniques published by John Wiley &amp; Sons Ltd. His areas of interest include solar PV grid interface systems, microgrids, power quality monitoring and mitigation, solar PV water pumping systems etc. He got various honours and awards in academics fields.</p>
Topic		Solar Photovoltaic Power Generation





**WORLD SOLAR ENERGY SCENARIO**

Top 10 countries by added solar PV capacity in 2019<sup>(1)</sup>

Country	Capacity (MW)	Percentage (%)
China	38,100	29.2%
United States	13,300	11.6%
India	9,900	8.6%
Japan	7,000	6.1%
Vietnam	4,800	4.2%
Spain	4,400	3.8%
Germany	3,900	3.4%
Australia	3,700	3.2%
Ukraine	3,100	2.8%
South Korea	2,800	2.5%
All others	31,000	24.1%

Top 10 countries by cumulative solar PV capacity in 2019<sup>(1)</sup>

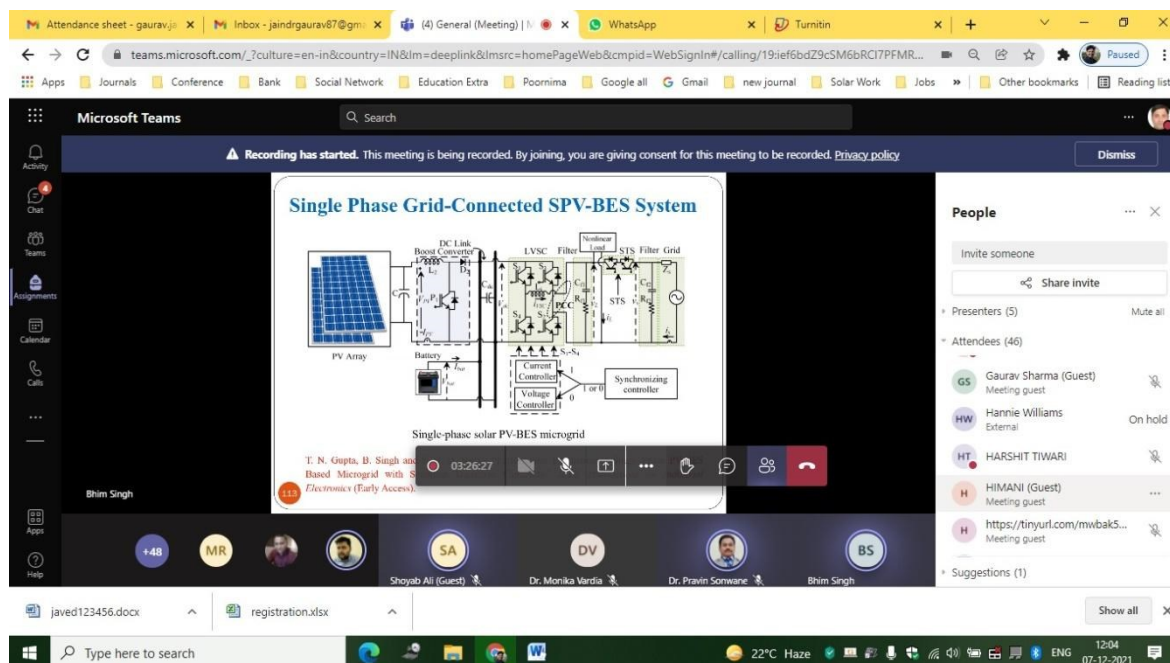
Country	Capacity (MW)	Percentage (%)
China	204,700	22.8%
United States	75,900	12.1%
Japan	43,300	10.6%
Germany	49,200	7.8%
India	42,800	8.8%
Italy	29,800	6.2%
Australia	14,800	2.3%
United Kingdom	13,300	2.1%
Spain	12,800	2.0%
France	12,800	2.0%

SOURCE : <https://iea-pvps.org/snapshot-reports/snapshot-2020/>

**People**

- Invite someone
- Share invite
- Presenters (5): Gaurav Jain, Bhim Singh (External), Dr. Monika Vardia, Dr. Pravin Sonwane, Pankaj Gakhkar (Organizer)
- Attendees (47)
- Suggestions (1)

*Dr. Mahesh Bunde*  
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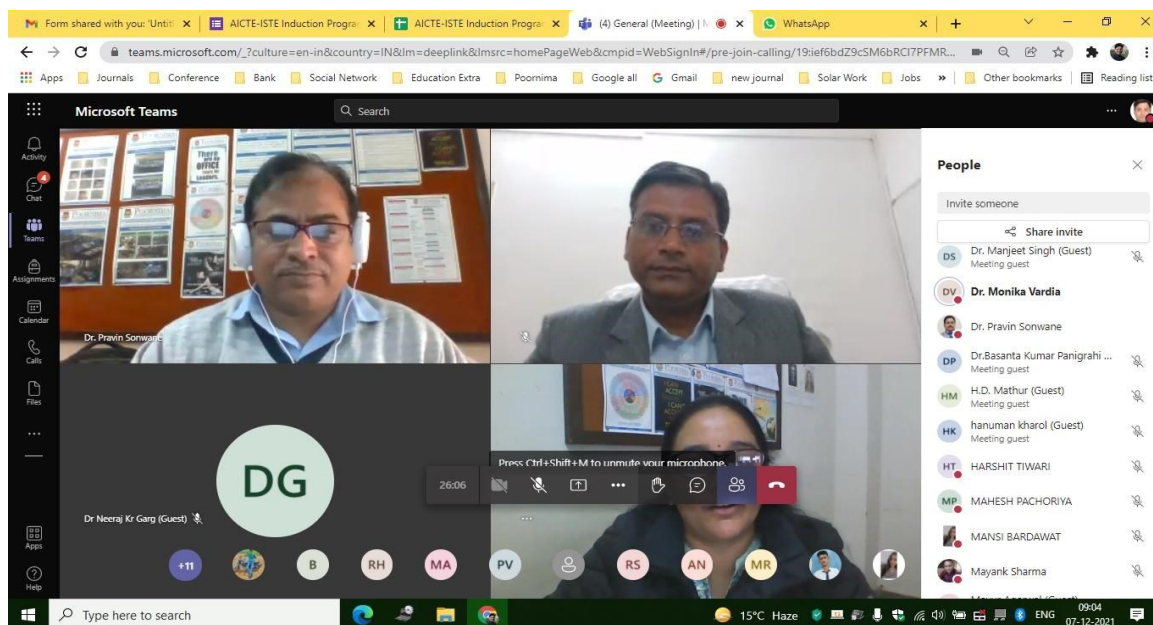


## Session-5

Expert Details		
5.	Dr. H. D. Mathur	Professor, Department of Electrical Engineering, BITS PILANI
	Topic	A New Paradigm Of Power Generation And Load In Future Electric Grid



  
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## Session-6

Expert Details		
6.	Dr. K.C.Sharma	Assistant Professor, Department of Electrical Engineering, NIT, Jalandhar, Punjab
Topic		Fast Frequency Response in Future Renewable Dominated Power System



  
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**OVERVIEW OF INDIAN POWER SYSTEM**

Indian Grid largest in the world

- 1 National Synchronous Grid
- 2 Electricity Generation  
Electricity Consumption  
Installed Generation Capacity  
Transmission System
- 3 Wind Generation
- 4 Solar Generation
- 5 Hydro Generation

Source: IEA Key World Energy Statistics 2020

Pie Chart Data:

Source	Percentage
Coal	52%
RE	20%
Wind Power	10%
Solar Power	12%
BM Power/Green	3%
Small Hydro Power	1%
Nuclear	2%
Gas	6%
Diesel	0%
Lignite	2%

**FREQUENCY RESPONSE**

Frequency response is spontaneous actions provided by system for balancing demand & power supply at frequency deviation

Governor senses shaft speed, proportional to frequency & modifies mechanical power applied to the turbine

Graph:  $f(t)$  vs  $t$

Diagram: Governor senses shaft speed, proportional to frequency & modifies mechanical power applied to the turbine.

## 4.8 Session-7

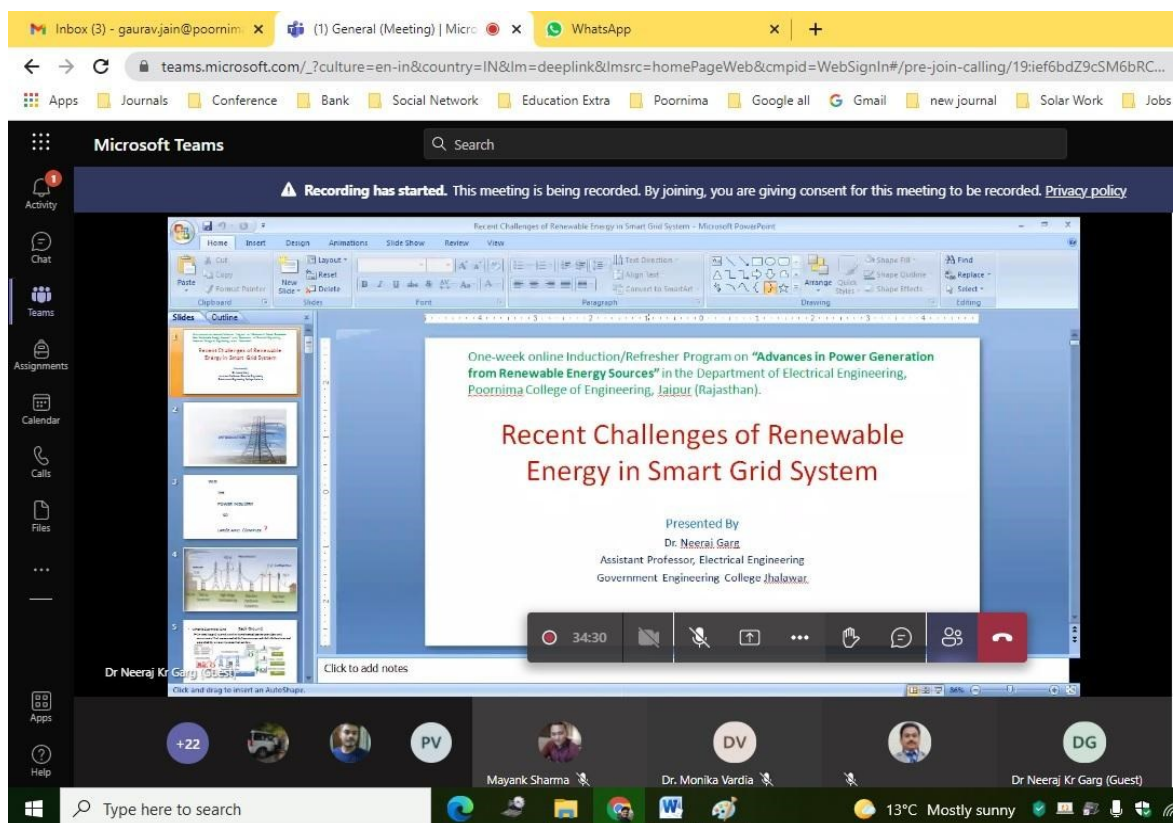
Expert Details		
7.	Dr. Neeraj Kumar Garg	Dr. Neeraj Kumar Garg had done Ph.D. from Rajasthan Technical University, Kota in “Transmission Pricing Practices in Restructured Indian Power Market”. M.Tech. in Power System from M.N.I.T, Jaipur and B.E. in Electrical from M.R.E.C., Jaipur. He is having Eighteen years of Teaching Experience.

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	working as a Assistant Professor & Head in the department of Electrical Engineering in Government Engineering College ,Jhalawar. He is having Three Years experience as a Lecturer in Jaipur Engineering College, Jaipur. Two years and seven months experience as a Lecturer in Sobhasaria Engineering College Sikar. He had published ample of publications in various national /international journals/conferences etc He Organized Seminar/Conference / Workshop/STC in different areas of electrical engineering. He attended many Seminars/Conferences / Workshops/STC.
<b>Topic</b>	Recent Challenges Of Renewable Energy In Smart Grid System



## Poornima College of Engineering - Activity Report - 2021-22



  
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## Session-8

Expert Details		
8.	Prof. (Dr.) Dheeraj Joshi	Dr. Dheeraj Joshi is Professor in Electrical Engg Deptt., Delhi Technological University since 2015. He has more than 20 years of teaching experience. He is guiding as well as guided 12 PhD candidates from various universities like DTU, NIT etc. He guided more than 30 Postgraduate dissertations from DTU and NIT Kurukshetra. He is Fellow IE(I), senior member IEEE and life member of ISTE, SSI India and various international societies. He organized two one week short term courses and one IEEE conference in DTU Delhi. He wrote book on Power Electronics, Drives and Advanced Applications, CRC Press (in Press) in year 2020. He published more than 200 publications in international/national journals and conferences. His area of interest are Power Electronics Converters, Induction Generators in Wind Energy Conversion Systems and Electric Drives. Earlier sir was Assistant Professor from Sept 2001 to July 2012 in NIT Kurukshetra.
Topic		Analysis and experimental investigations of self-excited induction generator under different operation conditions.



  
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The screenshot shows a Microsoft Teams meeting interface. The main window displays a presentation slide with the title "Analysis and Experimental Investigations of SELF-EXCITED INDUCTION GENERATORS under Different Operating Conditions" and the presenter's name "Dr. Dheeraj Joshi, Professor, EED, DTU Delhi". The slide also includes a small diagram of a circuit. The meeting controls at the bottom show a timer at 02:36:02 and a microphone icon. The right sidebar lists participants, including Gaurav Jain, Dheeraj Joshi (Guest), Dr. Monika Vardia, and Dr. Pravin Sonwane. The bottom status bar shows the system clock at 11:07 on 08-12-2021.

The screenshot shows a Microsoft Teams meeting interface. The main window displays a presentation slide with the title "Per phase equivalent circuit representation of self-excited induction generator" and a circuit diagram. The meeting controls at the bottom show a timer at 03:23:24 and a microphone icon. The right sidebar lists participants, including Gaurav Jain, Dheeraj Joshi (Guest), Dr. Monika Vardia, Dr. Pravin Sonwane, and Mayank Sharma. The bottom status bar shows the system clock at 11:55 on 08-12-2021.

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### Session-9

Expert Details		
9.	Prof. (Dr.) Ashish Shrivastava	Professor, Department Of Electrical Engineering, Manipal University, Jaipur
Topic		Wind power Systems-Current Trends and Challenges



### Session-10

Expert Details		
10.	Mr. Radhacharan Chandragiri	Mr. Radhacharan Chandragiri had done his M.Tech. (Engineering Systems) Dayalbagh Educational Institute, Agra. B.Sc. Engg. (Electrical) Dayalbagh Educational Institute, Agra. He is associated with many Professional Membership bodies, he had published ample of publications in various IEEE transaction, journals, conferences etc He Achieved Best Paper Award for the paper entitled “Effect of Momentum Factor with Sum Square Error Gradient Function” , International Conference on Recent Advances in Science and Engineering He guided many M.tech thesis as well as B.tech projects
Topic		An Overview Of Solar PV System Software





Inbox - gaurav.jain@poornima.co | (2) General (Meeting) | Micro | (1) WhatsApp

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### DIFFERENCE BETWEEN RENEWABLE & NON RENEWABLE ENERGY SOURCES

RENEWABLE ENERGY	NON- RENEWABLE SOURCE
1. It can be used again and again throughout its life.	1. It cannot be used again and again but one day it will be exhausted.
2. These are the energy resources which cannot be exhausted.	2. They are the energy resources which can be exhausted one day.
3. It has low carbon emission and hence environment friendly.	3. It has high carbon emission and hence not environment friendly.
4. It is present in unlimited quantity.	4. It is present in limited quantity and vanishes one day.
5. Large land area is required for the installation of its power plant.	5. Less land area is required for its power plant installation.
6. Solar energy, wind energy, tidal energy etc are the examples of renewable resources.	6. Coal, petroleum, natural gases are the examples of non-

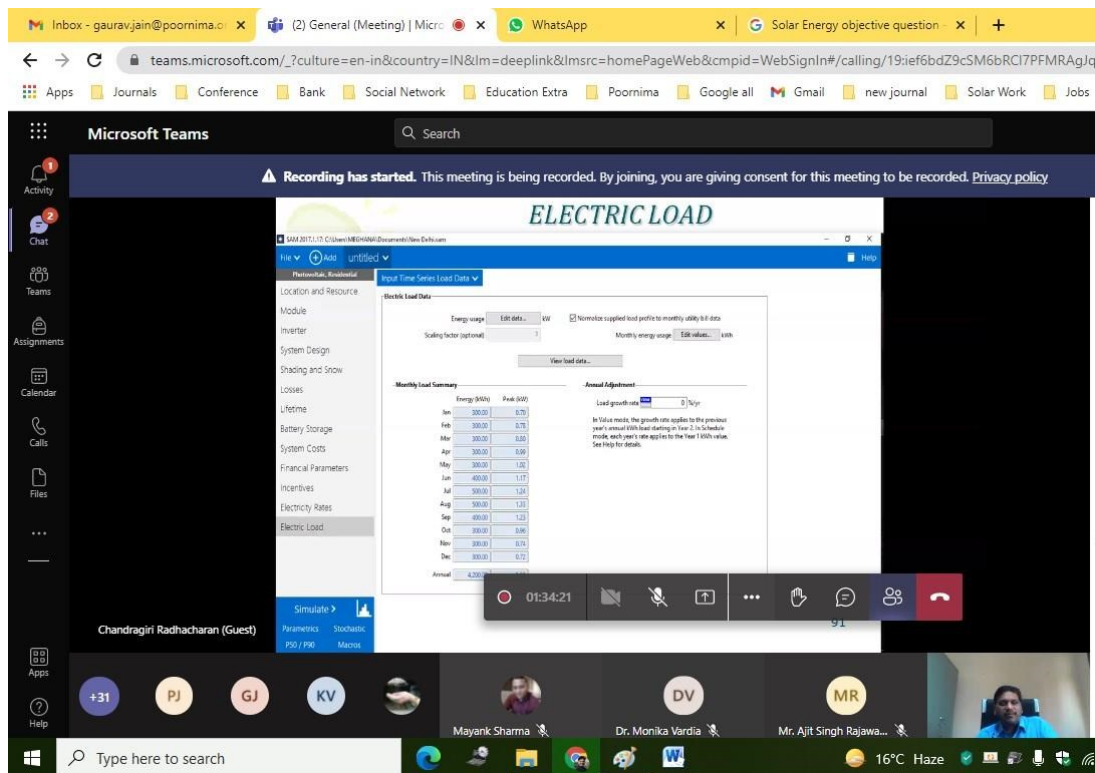
Chandragiri Radhacharan (Guest)

39:20

Mayank Sharma Dr. Monika Vardia Dr. Pravin Sonwane

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## Poornima College of Engineering - Activity Report - 2021-22



### Session-11

Expert Details		
11.	Dr. Rahul Agrawal	Professor, Electrical Engineering, Sandip University, Nashik
	Topic	Optimization Techniques in Renewable Energy Power Source



Session Guest  
**Prof. (Dr.) Rahul Agrawal**  
 Department of Electrical Engineering,  
 Sandip University, Nashik

**Dr. Mahesh Bunde**  
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Microsoft Teams interface showing a meeting titled "Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. Privacy policy". The screen displays a presentation slide titled "Jaya Optimization -Introduction". The slide content includes:

- This algorithm is based on the concept that the solution obtained for a given problem should move towards the best solution and should avoid the worst solution.
- This algorithm requires only the common control parameters and does not require any algorithm-specific control parameters.
- The algorithm always tries to get closer to success (i.e. reaching the best solution) and tries to avoid failure (i.e. moving away from the worst solution).
- The algorithm strives to become victorious by reaching best solution and avoid worst solution.

The meeting participants visible at the bottom are: Mr. Aji Singh Rajawa..., Dr. Rahul Agrawal (Guest), and Dr. Pravin Sonwane.

Microsoft Teams interface showing a meeting titled "Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. Privacy policy". The screen displays a presentation slide titled "Table 1 Initial population". The table shows data for 5 candidates, with the 4th candidate marked as the "best" solution and the 3rd candidate marked as the "worst" solution.

Candidate	$x_1$	$x_2$	$f(x)$	Status
1	15	18	349	
2	14	63	4165	
3	70	-6	4926	worst
4	-8	7	112	best
5	-12	-18	458	

The meeting participants visible at the bottom are: Mr. Aji Singh Rajawa..., Dr. Rahul Agrawal (Guest), and Dr. Pravin Sonwane.



## Session-12

Expert Details		
12.	Dr.Seema Agrawal	<p>Dr. Seema Agrawal did her B. E. from ECK in 2000 and M. Tech from RTU Kota in 2012 with honours. She completed her PhD in Power Electronics from RTU Kota in 2018. She has published more than 60 research papers in International Journals and IEEE International/ National Conferences. She worked as Assistant professor at Banasthali Vidyapith from 2001 to 2008. She is working as Sr. Assistant Professor in Electrical Engineering Department, at RTU Kota Since 2008. She guided 17 M. Tech thesis and supervising 3 Ph.D students presently.</p> <p>Her research interest is in Renewable energy sources, power Quality, Power electronic converter, phase locked loop, shunt active power filter.</p>
Topic		Application of ANN Controller In Solar Energy Generation System



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Dr. Monika Vardha

Dr. Seema Agrawal (Guest)

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23°C Haze

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### Advantage of Multi-Level Inverter

- Reduce Harmonic Distortion: Multilevel converters not only can generate the output voltages with very low distortion, but also can reduce the dv/dt stresses.
- Input Current: Multilevel converters can draw input current with low distortion.
- Switching Frequency: Multilevel converters can operate at both fundamental switching frequency and high switching frequency PWM.

Dr. Seema Agrawal (Guest)

Schedule-1.pdf

Resume\_Prakash.docx

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23°C Haze

### Session-13

Expert Details		
13.	Dr. Prakash Kumar	Assistant Professor, Dept of Electrical & Electronics Engineering, AMITY Patna, Bihar
Topic		Decentralized Autonomous Hybrid Renewable Power Generation Tools



Microsoft Teams interface showing a presentation slide titled "Standalone Hybrid Renewable Power Generation System Tools" presented by Dr. Prakash Kumar. The slide also mentions "Amity School of Engineering & Technology" and "Amity University Patna". The interface includes a sidebar with navigation options (Activity, Chat, Teams, Assignments, Calendar, Calls, Files, Help) and a bottom bar with participant avatars (JS, AS, MJ, DM, PJ) and a search bar.



The screenshot shows a Microsoft Teams meeting in progress. The browser tabs at the top include 'Inbox - jaingauravrtu@gmail.com', '(3) General (Meeting) | Micro...', and 'WhatsApp'. The address bar shows a Teams meeting URL. The left sidebar contains navigation icons for Activity, Chat, Teams, Assignments, Calendar, Calls, Files, and Help. The main content area displays a presentation slide titled 'INTRODUCTION' with a bulleted list of points regarding renewable energy. The bottom of the screen shows a taskbar with various application icons and a system tray indicating the time as 49:37 and the weather as 12°C Haze.

**Microsoft Teams**

Search

## INTRODUCTION

- Non promising nature of renewable energy sources needs interfacing with complementary sources, techno-economically feasible generation unit and/or self regulating control scheme.
- Standalone hybrid power systems take advantage of the complementary nature in profile of the renewable energy sources.
- Hybrid power systems ensure continuous and reliable power production.
- Due to low efficiency, high initial installation cost and discontinuous nature of availability; the renewable sources have yet been apart from the major contributor of power generation.
- The main advantages of electricity generation from renewable sources include readily available energy source, absence of harmful emissions and the advantage of local generation.

49:37

Dr. Prakash Kumar

+30

Mayank Sharma

Dr. Tanuj Manglani (G...

Dr. R K Kumawat

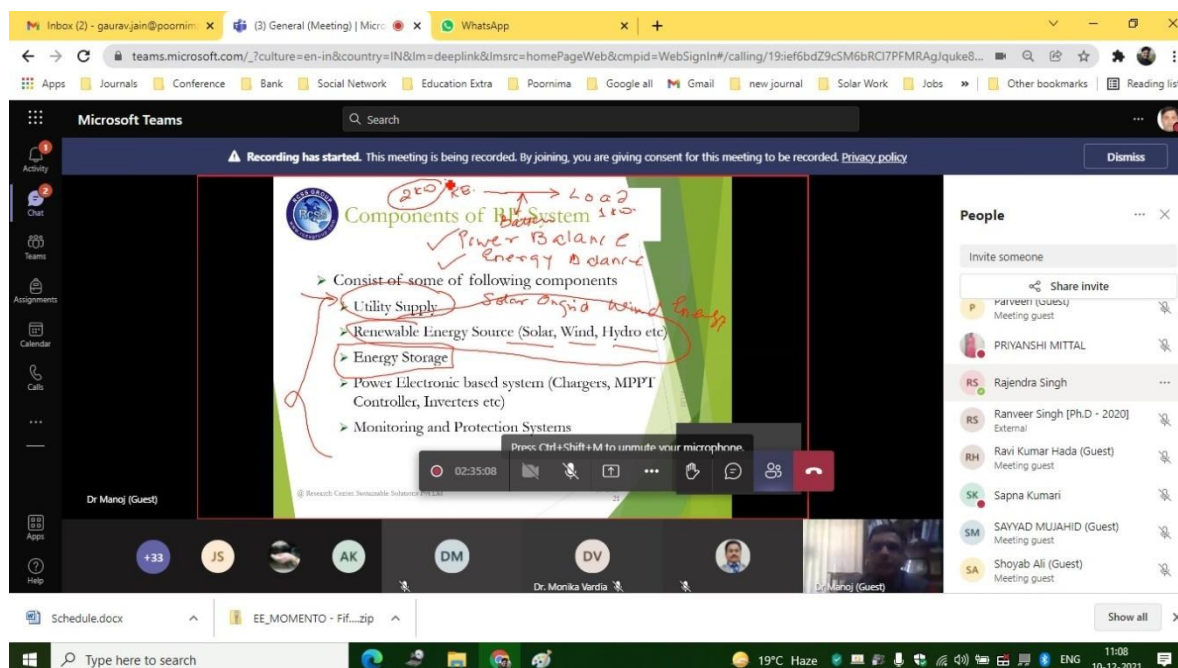
Dr. Prakash Kumar

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12°C Haze

## Session-14

Expert Details		
14.	Dr. Manoj Rath	Founder, Research Centre For Sustainable Solutions (RCSS) Pvt. Ltd., Energies, Nashik
	<b>Topic</b>	Microgrid Systems for Renewable Energy



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## Session-15

Expert Details		
15.	Dr.Tapan Kumar Gandhi	Dr Tapan K Gandhi is currently working as Associate Professor in the Dept. of Electrical Engineering, IIT Delhi and adjunct faculty in the school of AI and data science, IIT Jodhpur. He is also research affiliate to MIT, USA. He received his Ph.D. jointly from (MIT, USA) and obtained his Ph.D. in Biomedical Engineering from IIT Delhi. Following his Ph.D., he has spent 3+ years as postdoctoral research scientist at MIT, USA. Dr Gandhi was also awarded an INSPIRE Faculty in the engineering & technology category of the Department of Science & Technology, Govt. of India. During this 5 years tenure, he is awarded as the excellent INSPIRE Faculty in Engineering & Technology by DST, Govt. of India. His research expertise spans from Computer Vision, Assistive Technology, Medical Electronics, Signal Processing, machine learning, Cognitive Computing to Artificial intelligence. He has published papers in top ranking journals like Nature, PNAS, Current Biology, PloS Biology, IEEE Transactions. He has more than 150 publications in International journals and conference proceedings. He is PI & Co-PI of nearly 30 Crores funded projects from Industry as well as Govt. of India organizations.
Topic		Artificial Intelligence Techniques in Renewable Energy Power



  
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Drive 1:33 PM Fri 10 Dec

**AI is BOOMing**

IMAGENET

ImageNet (2012) & NLP (2018) moments

**Keys of success:**

- Large Benchmarks & leverage big data
- Leverage computation
- Open-source platform & papers
- Deep Learning revival

NB: not much new algorithms & theory

Growing Use of Deep Learning at Google

# of directories containing model description files

Across many products/services:

- Android
- Apps
- drug discovery
- Google
- Image understanding
- Maps
- Natural language processing
- Photos
- Robotics research
- Search
- Translation
- YouTube
- Many others

AI based on Deep Learning started to impact many fields & layers of society at a fast pace

05:00:08

AI & Electricity

Tapen Gandhi (Guest)

+34 GS RS DV SA TG

Dr. Monika Vardia Dr. Pravin Sonwane Shoyab Ali (Guest) Tapan Gandhi (Guest)

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Drive 1:56 PM Fri 10 Dec

AI-POWER.pptx

**2-Understand Your Data**

**Analyze the Data**

In this step, there are two important tasks which are understand data with descriptive statistics and understand data with visualization and plots.

**Process the data**

The components of data processing include pre-processing, profiling, cleansing, it often also involves pulling together data from different internal systems and external sources.

**Transform the data**

The traditional idea of transforming data from a raw state to a state suitable for modeling is where feature engineering fits in. Transform data and feature engineering may, in fact, be synonyms. And here is a definition of the latter concept. *Feature engineering is the process of transforming raw data into features that models, resulting in improved model performance.*

05:23:29

Tapen Gandhi (Guest)

+29 DG RS DV DM SA TG

Dr. Monika Vardia Dr. Tanuj Manglani (G... Shoyab Ali (Guest) Tapan Gandhi (Guest)

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## Session-16

Expert Details		
16.	Dr. Mukul Dixit	Assistant Professor, Roorkee College of Engineering, Roorkee
Topic		Implementation of Renewable energy sources in power system network



Form shared with you: Feed | (5) General (Meeting) | WhatsApp | UPES CCE - Online PCP | New Tab

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Microsoft Teams

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Dismiss

**PV Generation Model**

The output of PV mainly depends on irradiance. The distribution of hourly irradiance at a particular location usually follows a binomial distribution [97, 99]. Therefore both PDF has been utilized.

$$f_x = \begin{cases} \frac{\Gamma(\alpha + \beta)}{\Gamma(\alpha)\Gamma(\beta)} x^{\alpha-1} (1-x)^{\beta-1} & \text{for } 0 \leq x \leq 1, \alpha \geq 0, \beta \geq 0 \\ 0 & \text{otherwise} \end{cases}$$

$$\beta = (1 - \mu) \left[ \frac{\alpha + (1 + \mu)}{\sigma} - 1 \right] \quad \alpha = \frac{\mu + \beta}{1 - \mu}$$

The output power of PV-array at solar irradiance  $s_i$  can be calculated as

$$P^* = N \times FF \times I_p \times I_s$$

$$V_s = V_{oc} - K_p \times I_s$$

$$I_s = I_{sc} \left[ 1 + K_t (T_c - 25) \right]$$

$$FF = \frac{V_{max} \times I_{max}}{V_{oc} \times I_{sc}}$$

$$T_c = T_a + \frac{P^*}{hA} \left( \frac{20}{25} \right)$$

01:15:17 Press Ctrl+Shift+M to mute your microphone.

Table 3. Hourly mean mean and standard deviation of  $s_i$

Hour	Mean	Standard deviation	Hour	Mean	Standard deviation
6	0.0138	0.0186	12	0.7365	0.1510
7	0.1667	0.0532	13	0.6780	0.1281
8	0.3472	0.0619	14	0.5099	0.1011
9	0.5090	0.1002	15	0.4324	0.0762
10	0.6385	0.1239	16	0.2394	0.0446
11	0.7120	0.1551	17	0.0834	0.0230

Table 4. Details of PV Generation Model [97, 149]

Parameters	Unit	Values
$N_p$	W	30.36
$N_s$	W	41
$I_{sc}$	A	7.76
$V_{oc}$	V	28.36
$I_{sc}$	A	8.28
$V_{oc}$	V	36.66

Dr. Tanuj Mangani (G... vivek kumar jain (Gu... Dr. Pravin Sonwane

Quiz 5 (Responses).xlsx Quiz 4 (Responses).xlsx Quiz 3 (Responses).xlsx Quiz 2 (Responses).xlsx Quiz 1 (Responses).xlsx Show all

Type here to search 15°C Haze 09:47 11-12-2021

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Microsoft Teams interface showing a meeting titled "UPES CCE - Online PCP/CCE". The meeting is recording. The main content area displays a presentation slide titled "Table 8: Simulation results of case 4".

T <sub>irr</sub> (h/W)	% T <sub>irr</sub> Reduction	T <sub>irr</sub> (h/W)	WT Installation cost (INR/kW)	WT O&M cost (INR/kW)	PV Installation cost (INR/kW)	PV O&M cost (INR/kW)	T <sub>irr</sub> Reduction (h/W)
225.81	59.28 %	148.96	7727830.12	3772000.00	1173273.20	74891320.00	4884.56

The slide also includes a line graph showing PV output power (kW) over 24 hours for PV GS-1 and PV GS-2, and a bar chart showing the change in % of T<sub>irr</sub> over 24 hours.

People list:

- Presenters (8): Gaurav Jain, Dr. Monika Vardia, Dr. Pravin Sonwane, Mayank Sharma, Mukul Dixit (Guest) Meeting guest, MD, MD, MD.
- Guests: Mukul Dixit (Guest), Pankaj Gakhar Organizer.

Taskbar shows the Windows operating system with various applications open, including a browser with the Teams link and a file explorer showing quiz response files.

Microsoft Teams interface showing a meeting titled "UPES CCE - Online PCP/CCE". The meeting is recording. The main content area displays a presentation slide titled "Cost Analysis of WTGS".

The slide includes a bar chart showing the generated output power of WT for each hour over 24 hours.

Cost Analysis of WTGS:

- Purchase / Investment cost of WT (INR/kW):  $PC_{WT} = WT_{irr} \times WT_{cost}$
- WT Installation fee (INR/kW):  $WT_{inst\_fee} = 0.25 \times PC_{WT}$
- WT O&M cost:  $WT_{O\&M} = 0.05 \times (PC_{WT} + WT_{inst\_fee})$

People list:

- Presenters (8): Gaurav Jain, Dr. Monika Vardia, Dr. Pravin Sonwane, Mayank Sharma, Mukul Dixit (Guest) Meeting guest, MD, MD, MD.
- Guests: Mukul Dixit (Guest), Pankaj Gakhar Organizer.

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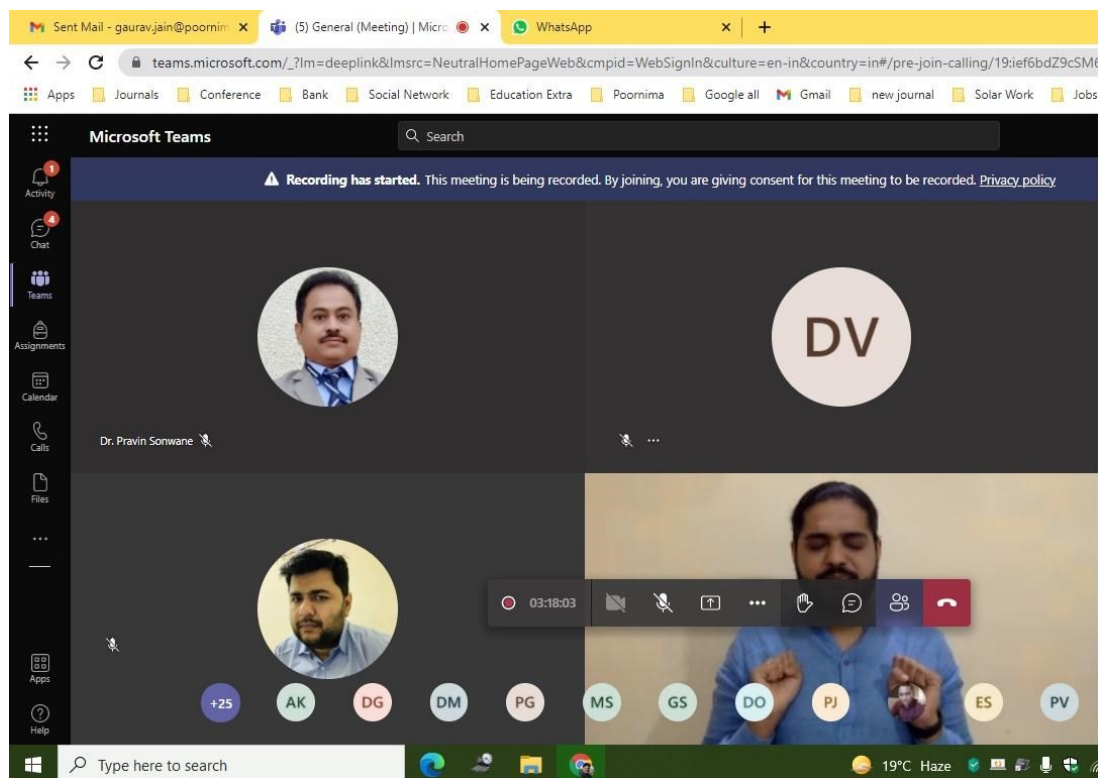


### Session-17

Expert Details		
17.	Mr. Chirag Patil	Director, Art of Living
Topic		Stress Management



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♦ ATTENDANCE LIST:

S. NO	NAME OF THE PARTICIPANT	DESIGNATION
1	PRANJAL JOG	ASST. PROFESSOR
2	SUWARNA SHETE	ASST. PROFESSOR
3	GAURAV SHARMA	ASST. PROFESSOR
4	RIAZ K. ISRANI	ASST. PROFESSOR
5	SHUBHAM SHEKHAR MEDHEKAR	ASST. PROFESSOR
6	CHANDRA PRAKASH JAIN	ASST. PROFESSOR
7	DR. YADVENDRA PAL SINGH	ASST. PROFESSOR
8	DR AMIT SHRIVASTAVA	PROFESSOR
9	RAVI KUMAR HADA	ASST. PROFESSOR
10	AMBIKA PRASAD HOTA	PROFESSOR
11	MR.DEEPAK JATIL	ASSO. PROFESSOR
12	DR TANUJ MANGLANI	PROFESSOR
13	BHAVANESH CHANDRA SHARMA	ASST. PROFESSOR
14	DR. MOHAMMED ASIM	ASST. PROFESSOR
15	DR.BASANTA KUMAR PANIGRAHI	ASSO. PROFESSOR
16	MD SAZZAD	ASST. PROFESSOR
17	PAWAN KUMAR YOGI	ASST. PROFESSOR
18	SAYYAD MUJAHID HANIF	ASST. PROFESSOR
19	RATHNAVEL P	ASST. PROFESSOR

20	DR. SARITA OLA	PROFESSOR
21	DR. JYOTI SHUKLA	ASSO. PROFESSOR
22	SOUMYA RANJAN DAS	ASST. PROFESSOR
23	M R RAMESH	ASST. PROFESSOR
24	MUKESH KUMAR SINGH	ASST. PROFESSOR
25	DR BHAUSAHEB BHANUDAS MUSMADE	PROFESSOR
26	RAJENDRA SINGH	ASST. PROFESSOR
27	DR. KAMLESH GAUTAM	ASST. PROFESSOR
28	GAURAV JAIN	ASSO. PROFESSOR
29	BINODINEE SWAIN	ASST. PROFESSOR
30	VINOD KUMAR	ASSO. PROFESSOR
31	ARAVELLI. S. L. K. GOPALAMMA	ASST. PROFESSOR
32	DR. R. K. KUMAWAT	ASST. PROFESSOR
33	MAYUR AGARWAL	ASST. PROFESSOR
34	SHOYAB ALI	ASST. PROFESSOR
35	GAURAV SINGH RATHORE	ASST. PROFESSOR
36	AVADHESH KUMAR SHARMA	ASST. PROFESSOR
37	DR. TARUN VARSHNEY	PROFESSOR
38	RUCHI VARSHNEY	ASST. PROFESSOR
39	BHUVNESH RATHOR	ASST. PROFESSOR

  
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 ISO-9001:2015 Institutional Area  
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40	DR. AMIT K. MANDAL	ASST. PROFESSOR
41	SAKSHI SHARMA	ASST. PROFESSOR
42	PANKAJ VERMA	ASST. PROFESSOR
43	SARFARAZ NAWAZ	ASSO. PROFESSOR
44	DR S.K.SHARMA	ASST. PROFESSOR
45	ANNU GOVIND	ASSO. PROFESSOR
46	DR.DEEPIKA CHAUHAN	ASSO. PROFESSOR
47	GAURAV KAPOOR	ASST. PROFESSOR
48	AJIT SINGH RAJAWAT	ASST. PROFESSOR
49	MANOJ KUMAR	ASST. PROFESSOR
50	DR. K. LENIN	PROFESSOR
51	JAKKULA KANTHAIAH	ASST. PROFESSOR
52	M.VEERASUNDARAM	ASST. PROFESSOR
53	DR. YATINDRA GOPAL	ASSO. PROFESSOR
54	NEERAJ GARG	ASST. PROFESSOR
55	EKATA SHARMA	ASST. PROFESSOR
56	SHIVAJI KHANDERAO MAKNIKAR	ASST. PROFESSOR
57	ATUL MURLIDHAR SHEWALE	ASST. PROFESSOR
58	MAYANK SHARMA	ASST. PROFESSOR
59	DR. MONIKA VARDIA	ASSO. PROFESSOR
60	PRATIK C. GHUTKE	ASST. PROFESSOR

♦ **PARTICIPANTS DISTRIBUTION:**

- ♦ Total number of registered participants \*116
- ♦ Total number male participants short-listed for the program \*87
- ♦ Total number of Female participants short-listed for the program \*29
- ♦ Number of male participants eligible for certificate \*58
- ♦ Number of female participants eligible for certificate \*19

♦ Feedback analysis:

Feedback Form

12/14/21, 11:15 AM

Feedback Form (AICTE-ISTE Induction/Refresher Programme on "Advances in Power Generation from Renewable Energy So...

## Feedback Form (AICTE-ISTE Induction/Refresher Programme on "Advances in Power Generation from Renewable Energy Sources")

All the participants are requested to give their valuable feedback. Please enter your correct name, affiliation which you want to print in Certificate for the eligible candidates. You can submit the form only once.

pravin.sonwane@poornima.org [Switch accounts](#)



\*Required

Email \*

Your email address

Salutation \*

- ☐ Mr.
- ☐ Ms.
- ☐ Mrs.
- ☐ Dr.
- ☐ Prof.
- ☐ Other: \_\_\_\_\_



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1/5

## Poornima College of Engineering - Activity Report - 2021-22

12/14/21, 11:15 AM

Feedback Form (AICTE-ISTE Induction/Refresher Programme on "Advances in Power Generation from Renewable Energy So...

Name of Participant \*

Your answer

Mobile Number \*

Your answer

ISTE Reg. No. (Fill "N/A", if not registered) \*

Your answer

Designation \*

- ☐ Professor
- ☐ Associate Professor
- ☐ Assistant Professor
- ☐ Other \_\_\_\_\_

Department \*

Your answer



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2/5

  
**Dr. Mahesh Bunde**  
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## Poornima College of Engineering - Activity Report - 2021-22

12/14/21, 11:15 AM

Feedback Form (AICTE-ISTE Induction/Refresher Programme on "Advances in Power Generation from Renewable Energy So...

Name of Organization \*

Your answer

City \*

Your answer

State \*

Your answer

Rate the knowledge shared in the session by session expert \*

- ☐ 1-Average
- ☐ 2-Above Average
- ☐ 3-Outstanding

Knowledge Enhancement \*

- ☐ 1-Average
- ☐ 2-Above Average
- ☐ 3-Outstanding



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3/5

  
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## Poornima College of Engineering - Activity Report - 2021-22

12/14/21, 11:15 AM

Feedback Form (AICTE-ISTE Induction/Refresher Programme on "Advances in Power Generation from Renewable Energy So...

Relevancy of Topics \*

- ☐ 1-Average
- ☐ 2-Above Average
- ☐ 3-Outstanding

About Speakers? \*

- ☐ 1-Average
- ☐ 2-Above Average
- ☐ 3-Outstanding

Overall Experience of FDP? \*

- ☐ 1-Average
- ☐ 2-Above Average
- ☐ 3-Outstanding

Suggestion (If any)

Your answer

A copy of your responses will be emailed to the address that you provided.

Submit

Clear form



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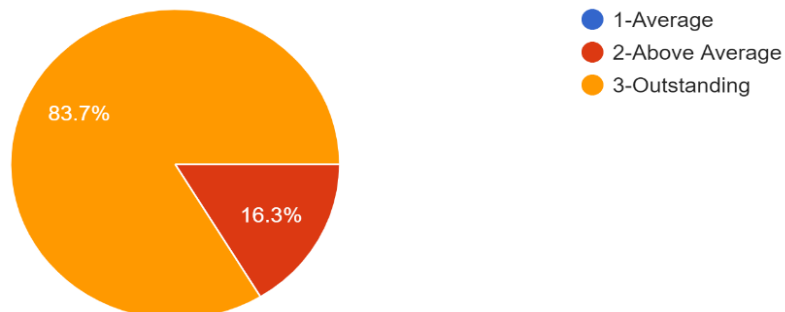
4/5

  
**Dr. Mahesh Bunde**  
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## Feedback Responses

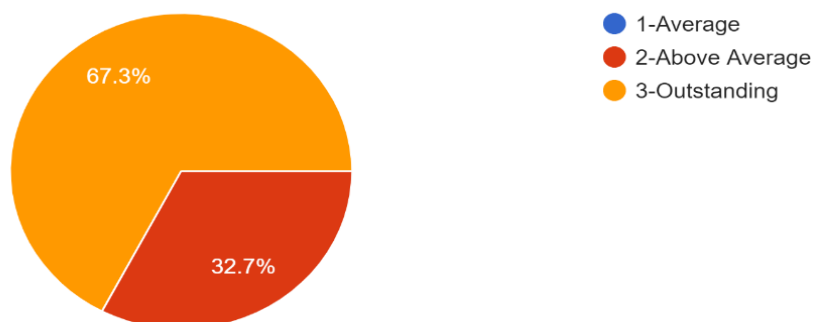
Rate the knowledge shared in the session by session expert

49 responses



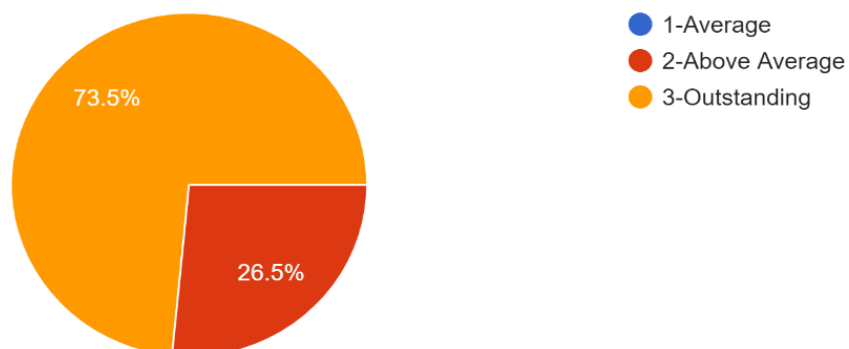
Knowledge Enhancement

49 responses



Relevancy of Topics

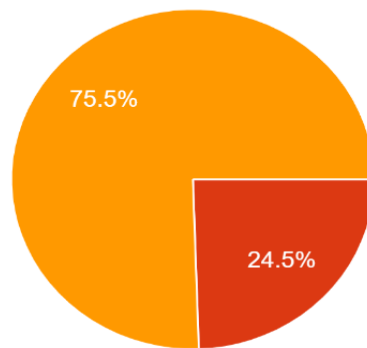
49 responses





### About Speakers?

49 responses



- 1-Average
- 2-Above Average
- 3-Outstanding