



FDP REPORT

TOPIC:

**Advanced trends for the optimization,
protection and control in electrical based
systems**

Dates: 17-Nov-2025 and 22-Nov-2025

University name: J.C Bose University of Science and Technology, YMCA Faridabad

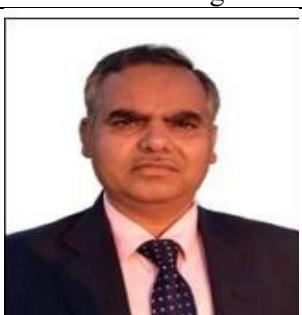
Coordinator: Dr. Abhinav Saxena

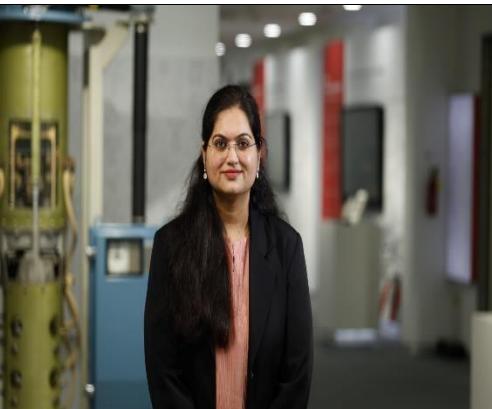
Co-coordinator: Dr. Yogendra Arya

AICTE ATAL FDP REPORT

The Department of Electrical Engineering, J.C Bose University of Science and Technology, YMCA Faridabad is organizing AICTE sponsored ATAL Faculty Development Programme on “Advanced trends for the optimization, protection and control in electrical based systems” between 17-Nov-2025 and 22-Nov-2025 in online mode.

The speakers for the 6-day workshop on “Advanced trends for the optimization, protection and control in electrical based systems” were:

Speaker 1: Dr. Sanjay Yadav	 A portrait photograph of Dr. Sanjay Yadav, a middle-aged man with grey hair, wearing a light blue and white checkered shirt.	Designation: Chief Scientist, CSIR-NPL Delhi Qualification: Ph.D. Topic: Role of Metrology for Nation Building with Special Reference to Visit Bharat 2047 Total year of experience: 35
Speaker 2: Dr. Soham Dutta	 A portrait photograph of Dr. Soham Dutta, a young man with dark hair, wearing a light blue shirt and a dark tie.	Designation: Power System Engineer, Open Access Technology India Pvt Ltd. Qualification: Ph.D. Topic: Island detection in active distribution system Total year of experience: 10
Speaker 3: Dr. Mukhtiar Singh	 A portrait photograph of Dr. Mukhtiar Singh, a man with dark hair, wearing a dark suit, a white shirt, and a patterned tie.	Designation: Professor, DTU, Delhi Qualification: Ph.D. Topic: Grid stability issues with reducing inertia due to increasing penetration level of RES & their remedies Total year of experience: 20
Speaker 4: Mr. Anuj Kumar		

 A photograph of Dr. Shivani Sharma, a man with glasses and a beard, wearing a dark suit, sitting in a gold-colored armchair and holding a microphone.	<p>Designation: Manager, Grid Controller of India Qualification: M.Tech Topic: Operational planning & challenges of Indian grid: An overview Total year of experience: 10</p>
<p>Speaker 5: Dr. Shivani Sharma</p>  A photograph of Dr. Arunesh Kumar Singh, a woman with long dark hair and glasses, wearing a black blazer over a pink top, standing in an office environment.	<p>Designation: Principal Technical Consultant, Power Consulting, Hitachi Energy, India Qualification: Ph.D. Topic: Large Renewables and Distributed Energy Resources (DERs): Protection Coordination Perspectives for Hybrid Power Systems Total year of experience: 20</p>
<p>Speaker 6: Dr. Arunesh Kumar Singh</p>  A photograph of Prof. Ashish Shrivastava, a man with dark hair, wearing a light blue shirt, looking directly at the camera.	<p>Designation: Associate Professor, Jamia Millia Islamia, New Delhi Qualification: Ph.D. Topic: Neuro controller: An innovative approach (Dynamic pole motion control) Total year of experience: 17</p>
<p>Speaker 7: Prof. Ashish Shrivastava</p>  A photograph of Dr. Nishant Kumar, a man with glasses and dark hair, wearing a blue suit, looking directly at the camera.	<p>Designation: Professor, SVSU, Palwal, Haryana Qualification: Ph.D. Topic: Electric vehicle: Current trends, challenges & opportunities Total year of experience: 24</p>
<p>Speaker 8: Dr. Nishant Kumar</p>	

	<p>Designation: Assistant Professor, IIT Jodhpur Qualification: Ph.D. Topic: Metaheuristic optimization technique for solar powered electric vehicles Total year of experience: 10</p>
<p>Speaker 9: Dr. KPS Rana</p>	
	<p>Designation: Professor, NSUT New Delhi Qualification: Ph.D. Topic: MPPT of Solar photovoltaic cell Total year of experience: 25</p>
<p>Speaker 10: Dr. Ramesh Bansal</p>	
	<p>Designation: Professor, University of Sharjah Qualification: Ph.D. Topic: Renewable energy integration in smart grid environment Total year of experience: 25</p>
<p>Speaker 11: Prof. M L Kohle</p>	
	<p>Designation: Professor, University of Agder, Norway Qualification: Ph.D. Topic: Operation of Distributed Energy Systems as Active Generators for Reliable Microgrid Functionality with Increasing Solar PV Penetration under PM Surya Ghar Initiative Total year of experience: 30</p>
<p>Speaker 12: Mr. Rohit Saxena</p>	

	<p>Designation: Ericsson , Specialist Qualification: B.Tech Topic: 5G Radio Network Total year of experience: 14</p>
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Speaker 13: Dr. Suresh Singh

	<p>Designation: Principal Engineer, Enerzinx India Pvt. Ltd Qualification: Ph.D. Topic: Renewable Energy Integration: Challenges and path forward Total year of experience: 21</p>
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The inaugural program of the FDP was held on 17-11-2025 through online mode on google meet. . It begins with Kulgeet of the university and followed with the brief introduction about the FDP by coordinator and co-coordinator Abhinav Saxena and Dr. Yogendra Arya respectively. Further, Prof. Raj Kumar, Dean FET address the gathering and emphasize the importance of FDP to the participants. Further, Prof. Ajai Ranga, Registrar motivate the participants and encourage the towards implementation of various optimization process in electrical based system. Further, Prof. Rajive Kumar, Vice chancellor addresses the participants with his motivational words about the significance of FDP towards getting the knowledge about the sustainability, ecology, smart cities, clean and green energy. At the end, Prof. P.R Sharma, Chairperson, department of electrical engineering, JCBUST, YMCA Faridabad concludes the inaugural ceremony with vote of thanks.

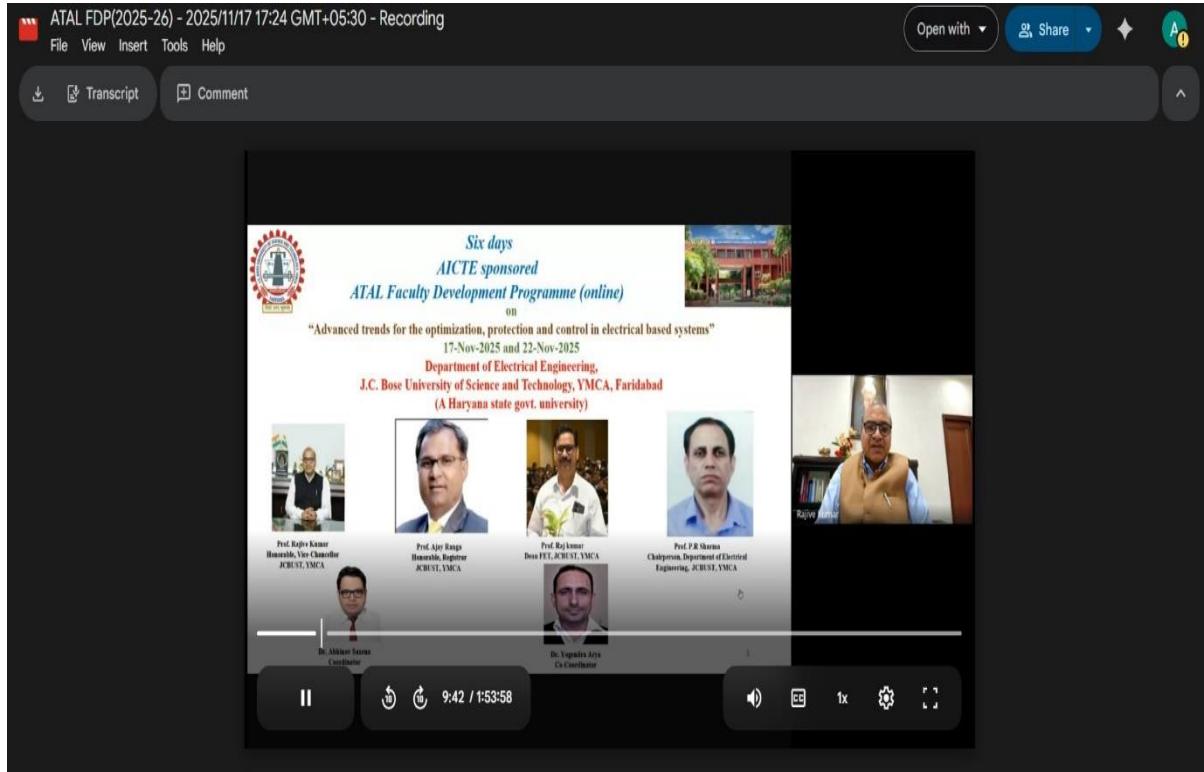
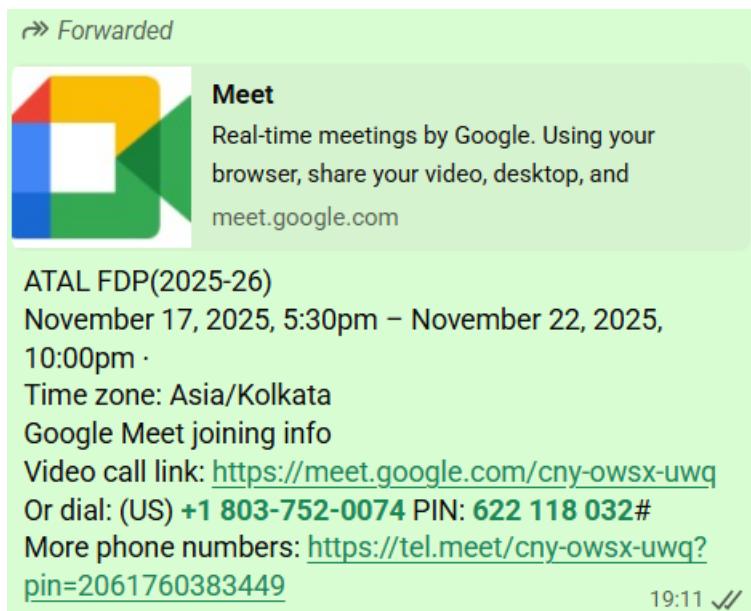
The 6 days online FDP has 13 eminent speakers from the various reputed organisation and industry across the nation. The Faculty Development Programme (FDP) is designed to enhance the professional competence and teaching excellence of educators through meaningful interaction, training, and exposure to current advancements. A key highlight of every FDP is the inclusion of eminent speakers — distinguished academicians, researchers, industry experts, and thought leaders who bring immense value through their knowledge and experience.

These eminent speakers are individuals of national and international repute who have made significant contributions in their respective domains. They serve as mentors and motivators, sharing innovative teaching methodologies, emerging research trends, and real-world insights that bridge the gap between academia and industry.

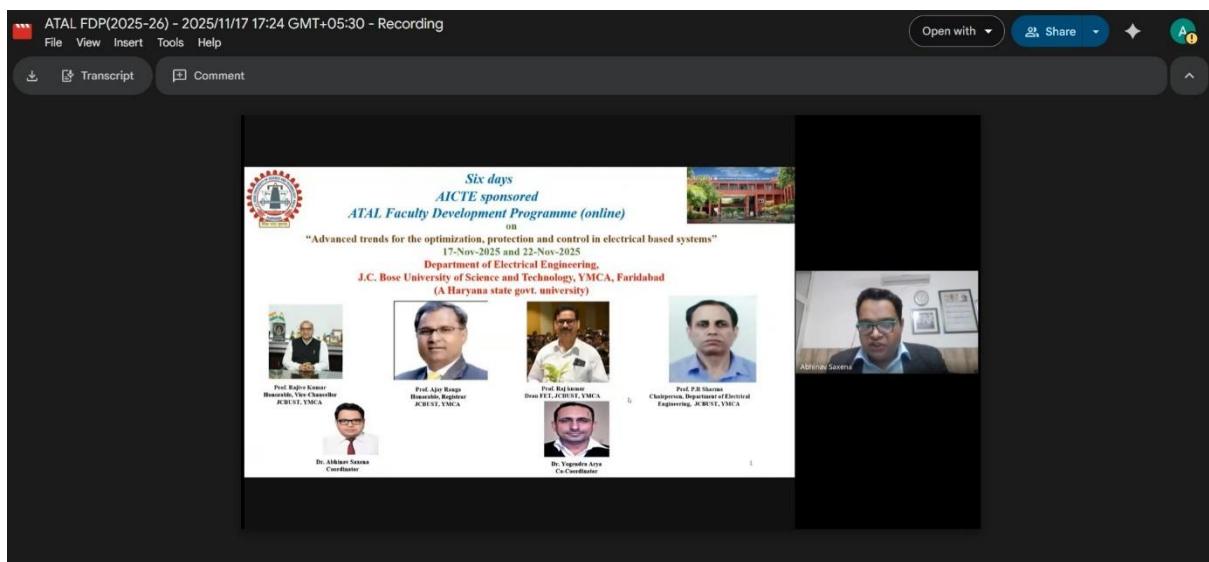
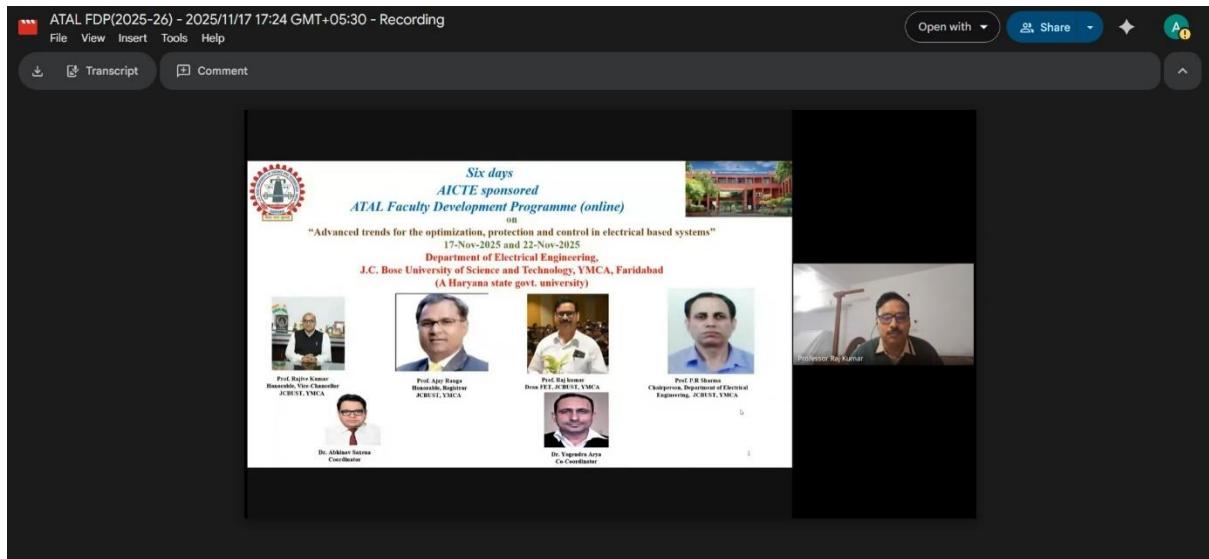
Through their engaging lectures, case studies, and interactive sessions, the speakers inspire participants to adopt modern pedagogical tools, research-oriented thinking, and outcome-based education practices. They also emphasize the importance of continuous learning, interdisciplinary collaboration, and ethical values in teaching and research.

Further, the valedictory session of the FDP was held on 22—November -2025 followed by online quiz. At the end, feedback and experience of participants were taken and all program ended with the vote of thanks by Prof. P.R Sharma, Chairperson, department of electrical engineering, JCBUST, YMCA Faridabad

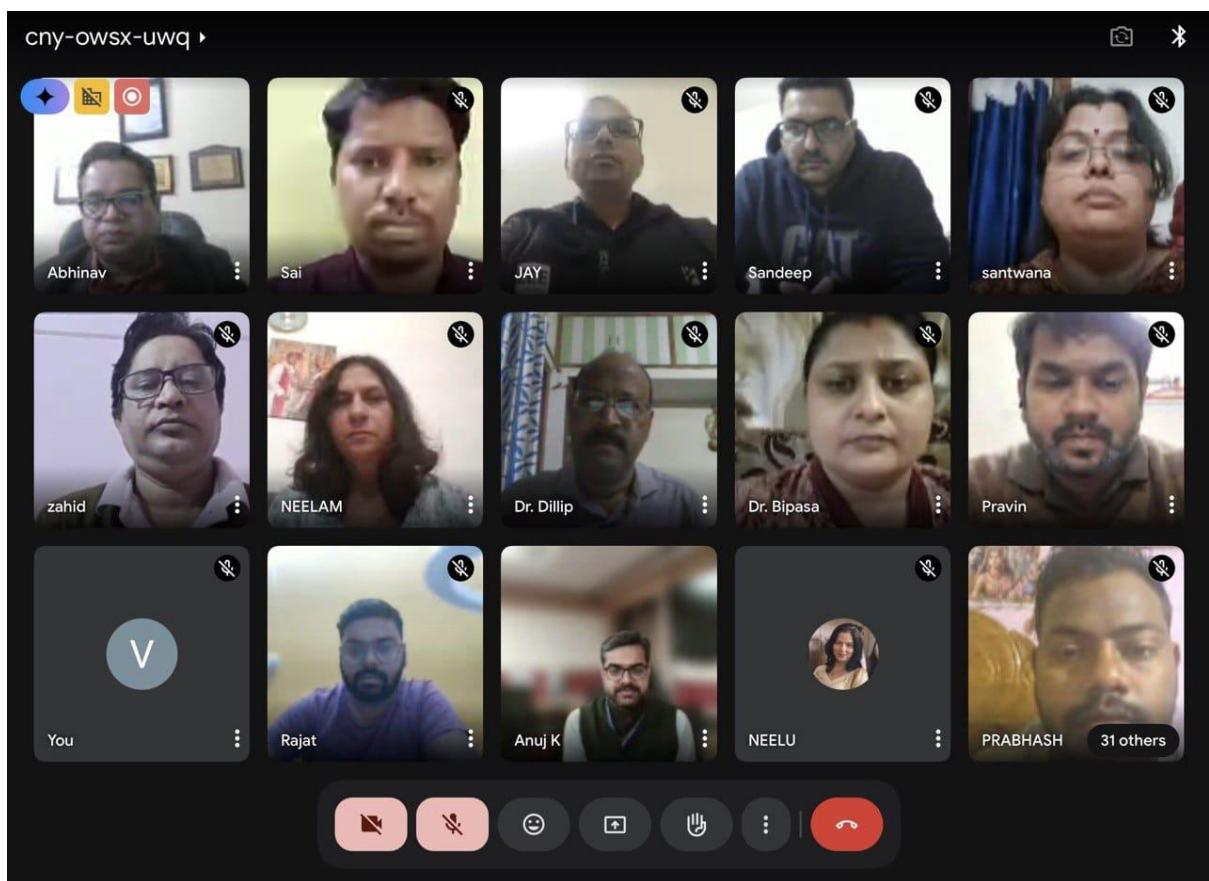
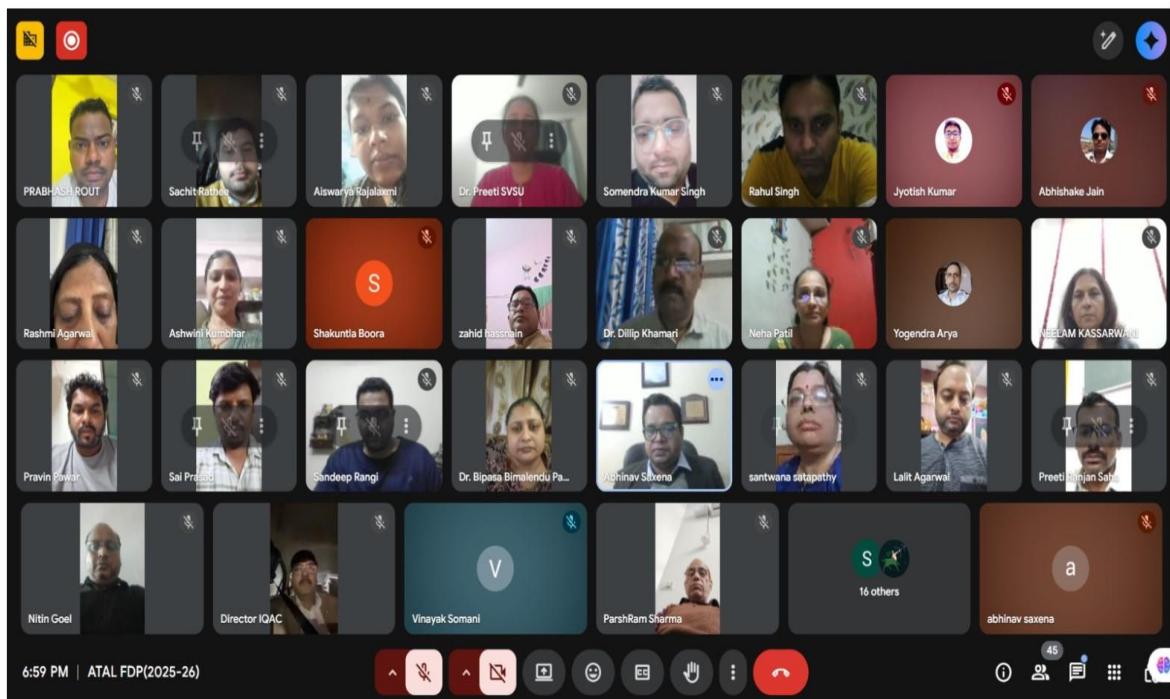
The google meet of online meeting schedule from 17-11-2025 to 22-11-2025



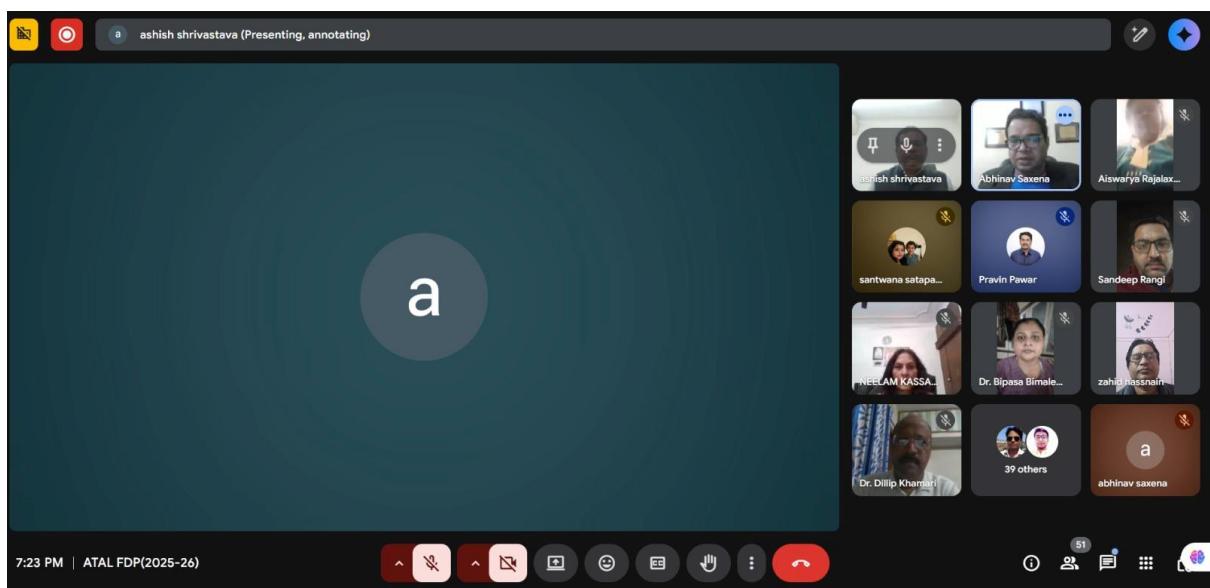
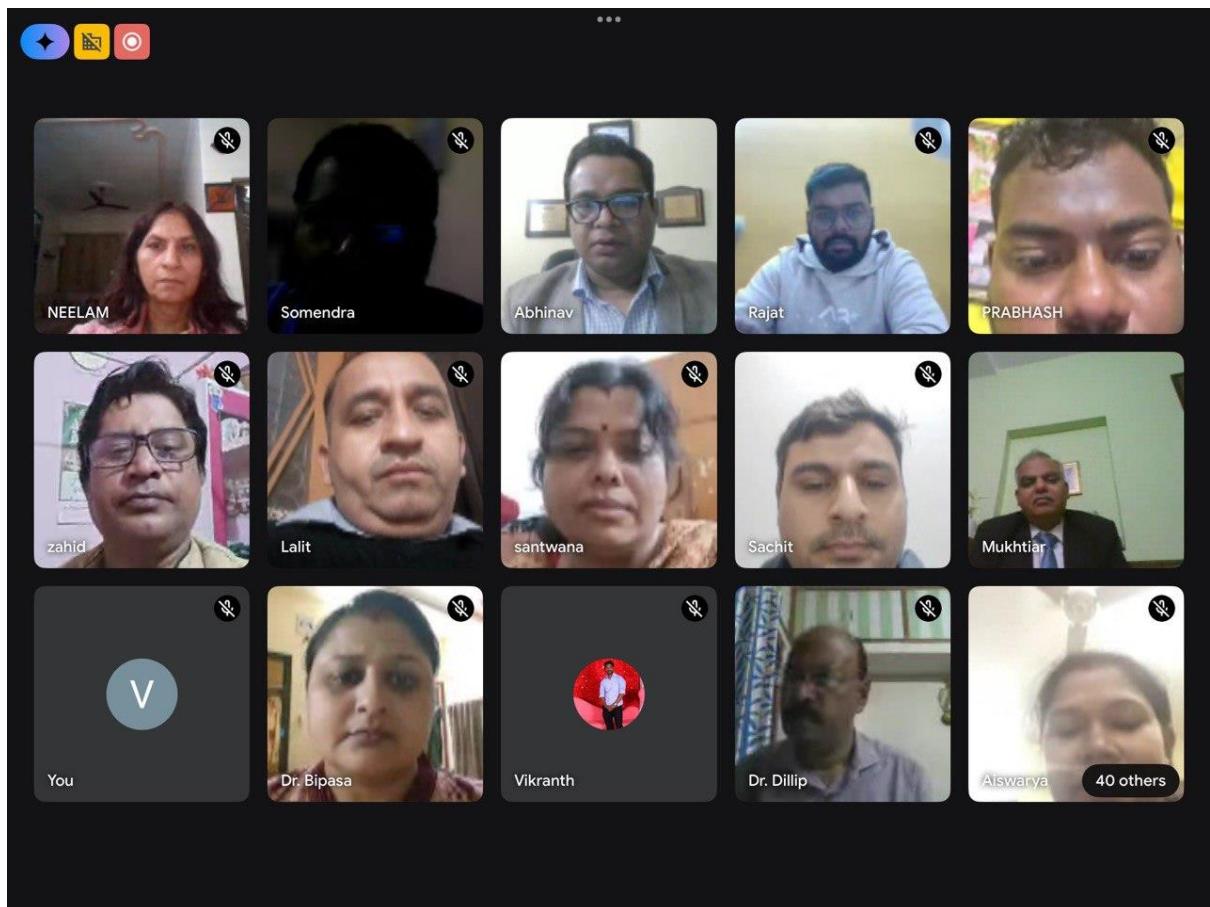
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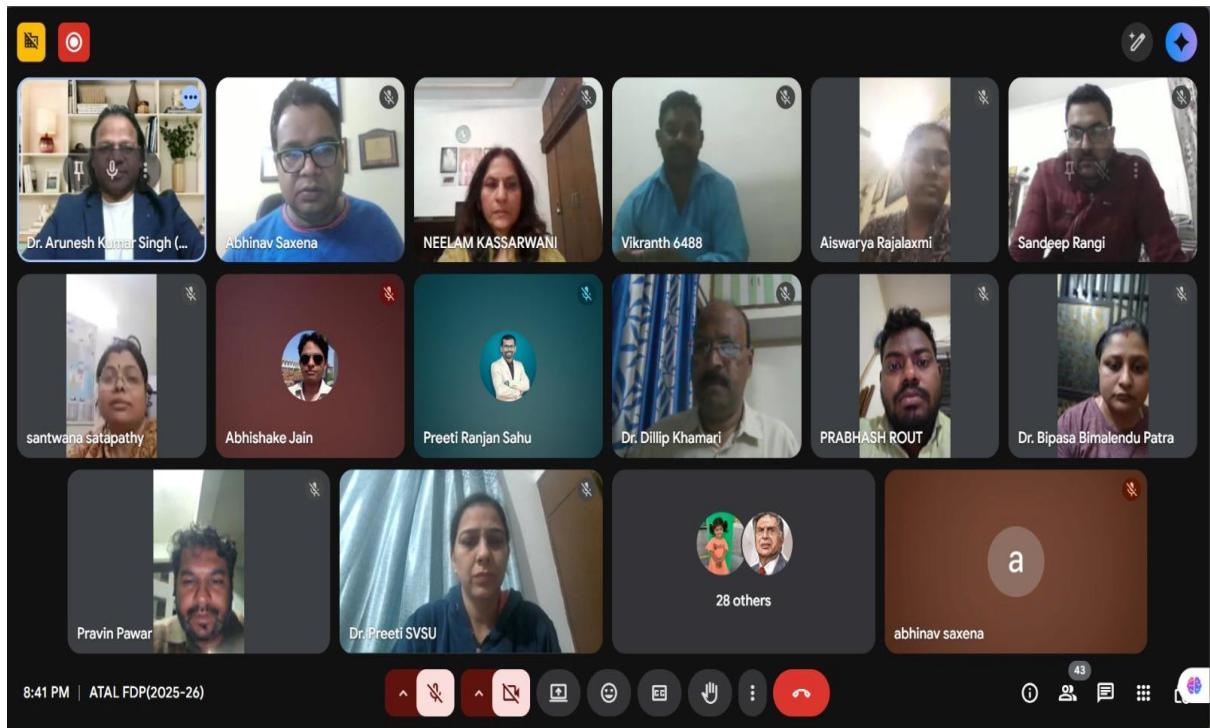
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ATAL Online 6 Day Faculty Development Programmes

2025-26 Schedule

FDP Thrust Area: Smart Cities & Mobility, Blue / Green Economy, Energy, Sustainability & Climate Change, Advanced Materials, Rare-earth & Critical Minerals, Manufacturing & Industry 4.0, Quantum Technologies, Space and Defense, High Performance Computing

FDP Title: Advanced trends for the optimization, protection and control in electrical based systems

Start Date: 17th November 2025

End Date: 22th November 2025

Day 1 (17- NOV)	Day 2 (18- NOV)	Day 3 (19- NOV)	Day 4 (20- NOV)	Day 5 (21- NOV)	Day 6 (22- NOV)
6:00PM to 6:30PM Inaugural Session	6:00PM to 7:30PM Session 3 Topic: Power Electronics in Power System Name of the Expert: Dr. Mukhtiar Singh Designation & Organization: Professor, DTU, Delhi Years of Exp: 20	6:00PM to 7:30PM Session 5 Topic: Large Renewables and Distributed Energy Resources (DERs): Protection Coordination Perspectives for Hybrid Power Systems Name of the Expert: Dr. Shivani Sharma Designation & Organization: Principal Technical Consultant, Power Consulting, Hitachi Energy, India Years of Exp: 20	6:00PM to 7:30PM Session 7 Topic: Electric motors for EV applications Name of the Expert: Dr. Ashish Shrivastava Designation & Organization: Professor and SVSU Years of Exp: 24	6:00PM to 7:30PM Session 9 Topic: MPPT of SPV Name of the Expert: Dr. KPS Rana Designation & Organization: Professor, NSUT, Delhi Years of Exp: 25	2:00PM to 3:30PM Session 11 Topic: Operation of Distributed Energy Systems as Active Generators for Reliable Microgrid Functionality with Increasing Solar PV Penetration under PM Surya Ghar Initiative Name of the Expert: ML Kolhe Designation & Organization: Full Professor University of Agder, Norway Years of Exp: 30

ATAL Online 6 Day Faculty Development Programmes 2025-26 Schedule

FDP Thrust Area: Smart Cities & Mobility, Blue / Green Economy, Energy, Sustainability & Climate Change, Advanced Materials, Rare-earth & Critical Minerals, Manufacturing & Industry 4.0, Quantum Technologies, Space and Defense, High Performance Computing

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Day 1 (17- NOV)	Day 2 (18- NOV)	Day 3 (19- NOV)	Day 4 (20- NOV)	Day 5 (21- NOV)	Day 6 (22- NOV)
6:30PM to 8:00PM Session 1 Topic: Role of Metrology for Nation Building with Special Reference to Visit Bharat 2047 Name of the Expert: Dr. Sanjay Yadav Designation & Organization: Chief Scientist, CSIR-NPL Delhi- Years of Exp: 35	7:30PM to 9:00PM Session 4 Topic: Operational challenges of Indian grid Name of the Expert: Anuj Kumar Designation & Organization: Manager, Grid Controller of India Years of Exp: 10	7:30PM to 9:00PM Session 6 Topic: Eddy current braking system Name of the Expert: Dr. Arunesh Kumar Singh Designation & Organization:, Associate Professor, Jamia Millia Islamia, New Delhi Years of Exp: 17	7:30PM to 9:00PM Session 8 Topic: Metaheuristic Optimisation technique for Solar Power Electric Vehicle Name of the Expert: Dr. Nishant Kumar Designation & Organization: AP, IIT Jodhpur Years of Exp: 6	7:30PM to 9:00PM Session 10 Topic: Renewable energy integration in smart grid environment Name of the Expert: Prof. RC Bansal Designation & Organization: University of Sharjah Years of Exp: 25	3:30PM to 5:00PM Session 12 Topic: 5G Radio Network Name of the Expert: Rohit Saxena Designation & Organization: Ericsson , Specialist Years of Exp: 14
Day 1 (17- NOV) 8:00PM to 9:30PM Session 2	b				5:00PM to 6:30PM Session 13 Topic: Renewable Energy Integration:

<p>Topic: Island detection in active distribution system</p> <p>Name of the Expert: Dr. Soham Dutta</p> <p>Designation & Organization: Power System Engineer, Open Access Technology India Pvt Ltd ,</p> <p>Hyderabad, Telangana</p> <p>Years of Exp: 10 year</p>	<p>Challenges and path forward</p> <p>Name of the Expert: Dr. Suresh Singh</p> <p>Designation & Organization: Principal Engineer, Enerzinx India Pvt. Ltd</p> <p>Years of Exp: 21 years</p>
	<p>6:30PM to 7:30PM</p> <p>Online test & feedback</p>
	<p>7:30PM to 8:00PM</p> <p>Valedictory Session</p>