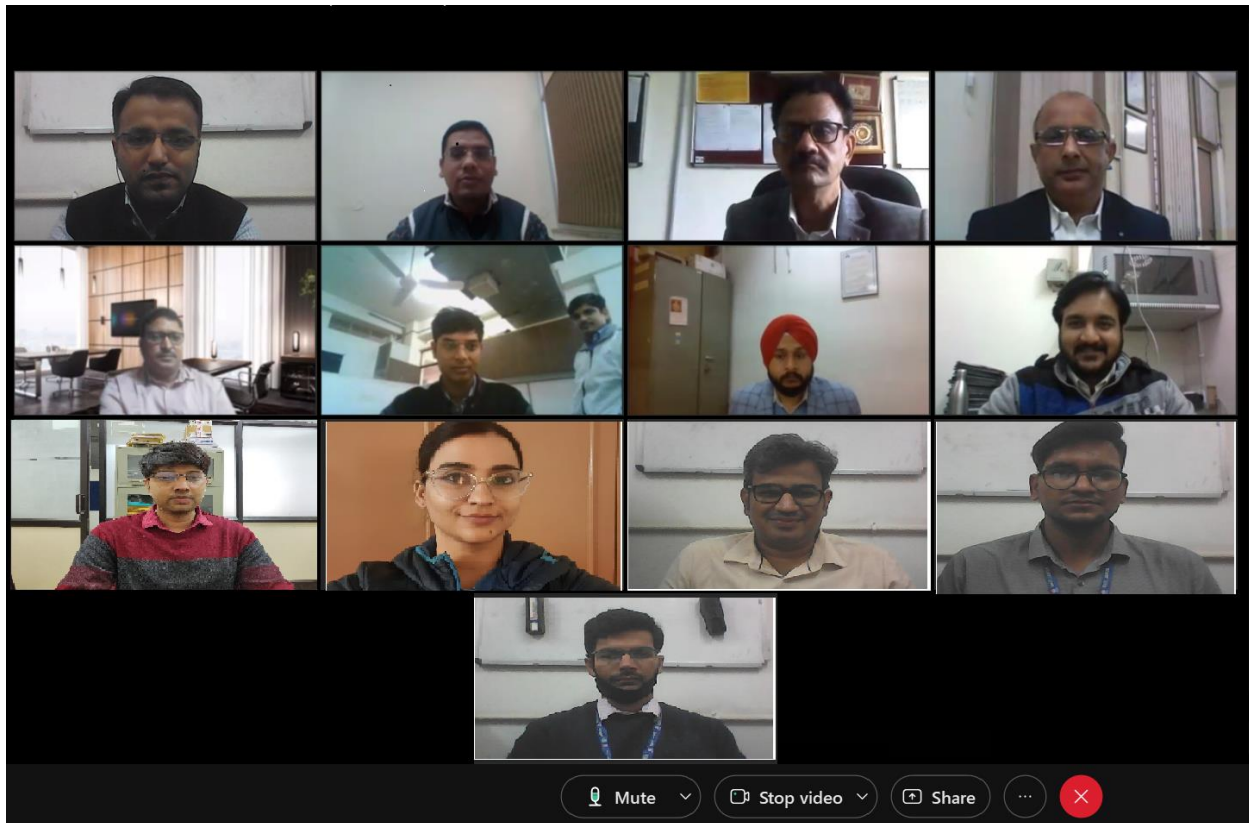


SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN
(Department of Civil Engineering & Centre of Transportation Engineering)

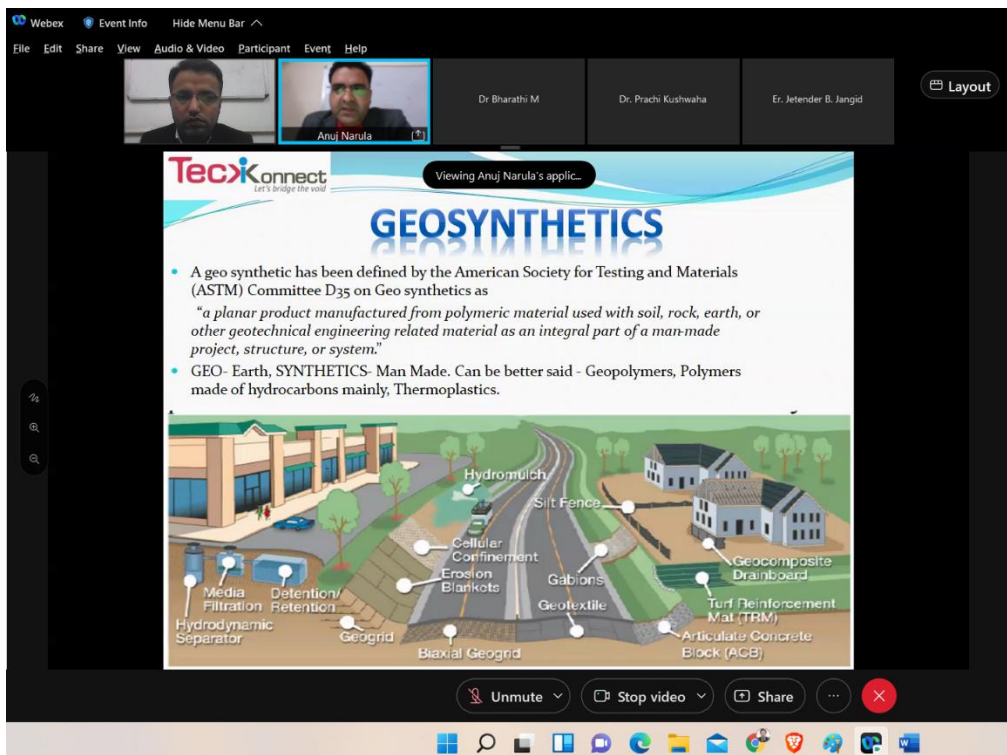
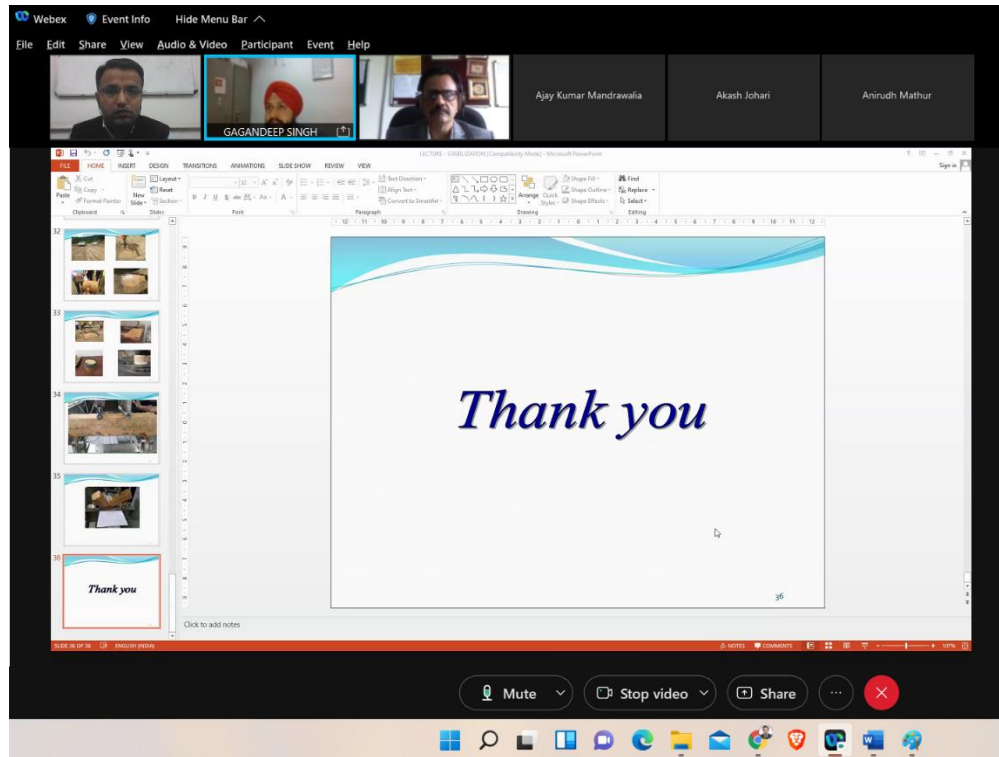
5 – Day Faculty Development Programme on
“Transportation Geotechnics and Materials for Sustainable Infrastructure (TGMSI-2021)”

REPORT OF THE EVENT

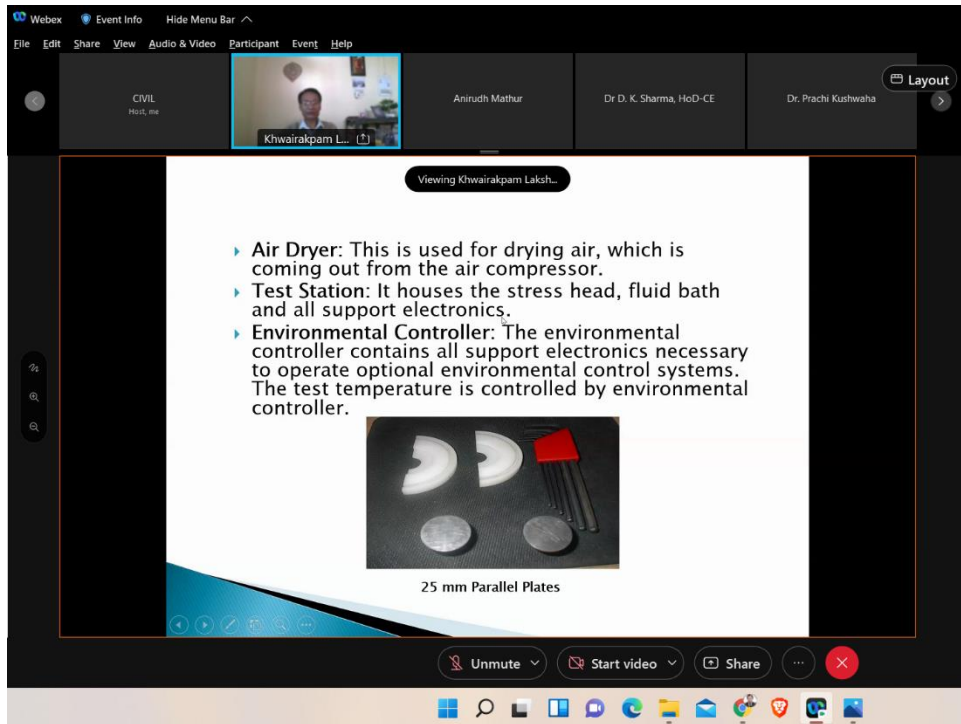
5-day faculty development programme on “Transportation Geotechnics and Materials for Sustainable Infrastructure” was organized collaboratively by Department of Civil Engineering and Centre of Transportation Engineering in SKIT Jaipur from 13th to 17th December 2021. Mr. Pradeep Kumar Garg (Chief Engineer, RUDSICO Jaipur) graced the event as chief guest. Dr. Mukesh Arora (Head – Faculty affairs) welcomed the guests and participants. Prof. D. K. Sharma (Head – Civil Engineering) briefed the audience about the FDP. Prof. B. L. Sharma delivered a vote of thanks for the inaugural ceremony. Ten Eminent speakers from industry, academics and research institutions shared their knowledge and experiences during the course of event. More than 370 faculty members from various educational institutes from India and abroad registered to attend the event.



On Day 1, first session was delivered by Er. Gagandeep Singh (Senior Scientist, CRRI). He emphasized on methodology adopted in stabilization of lower layers of pavement. Second session of the day was taken up by Er. Anuj Narula (Founder-Teckkconnect). He explained the various types of geosynthetics used in field and what are the advantages of using geosynthetics.



On Day 2, first session was delivered by Dr. Kh. Lakshman Singh (Assistant Professor-NIT Silchar). He enlightened the participants about the rheological properties of bitumen. All the parameters determined through Direct Shear Rheometer were explained. Second session of the day was taken up by Dr. Neha Shrivastava (Assistant Professor-MNIT Jaipur). She explained about problems related to liquefaction of soil and how grouting methods can help in preventing liquefaction.



The screenshot shows a Webex meeting interface. The top bar includes 'Webex', 'Event Info', and 'Hide Menu Bar'. Below this is a menu with 'File', 'Edit', 'Share', 'View', 'Audio & Video', 'Participant', 'Event', and 'Help'. The main content area displays a presentation slide titled 'Viewing Khwairakpam Latchu...'. The slide contains the following text:

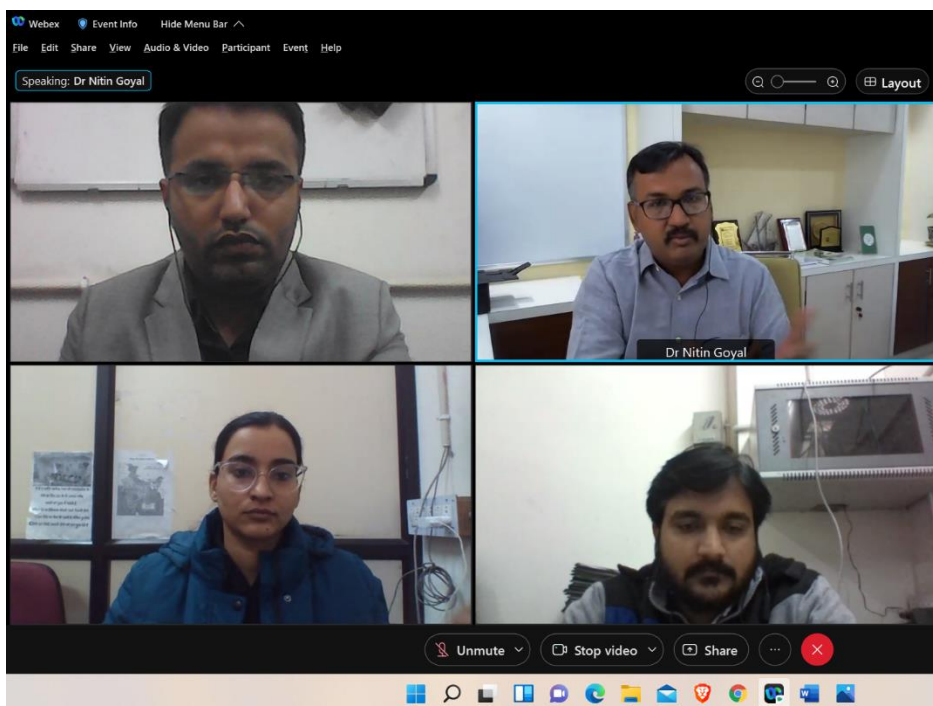
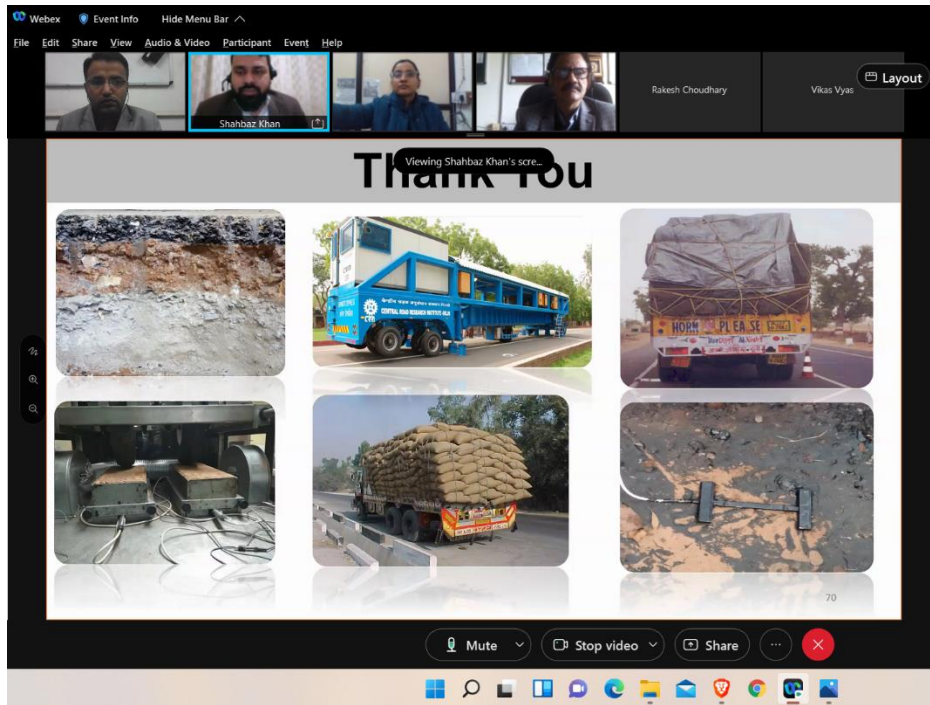
- ▶ **Air Dryer:** This is used for drying air, which is coming out from the air compressor.
- ▶ **Test Station:** It houses the stress head, fluid bath and all support electronics.
- ▶ **Environmental Controller:** The environmental controller contains all support electronics necessary to operate optional environmental control systems. The test temperature is controlled by environmental controller.

Below the text is an image of '25 mm Parallel Plates' showing two white semi-circular plates and two circular metal plates. The bottom of the slide has navigation icons. The Webex control bar at the bottom includes 'Unmute', 'Start video', 'Share', and a red 'X' icon. The Windows taskbar is visible at the very bottom.

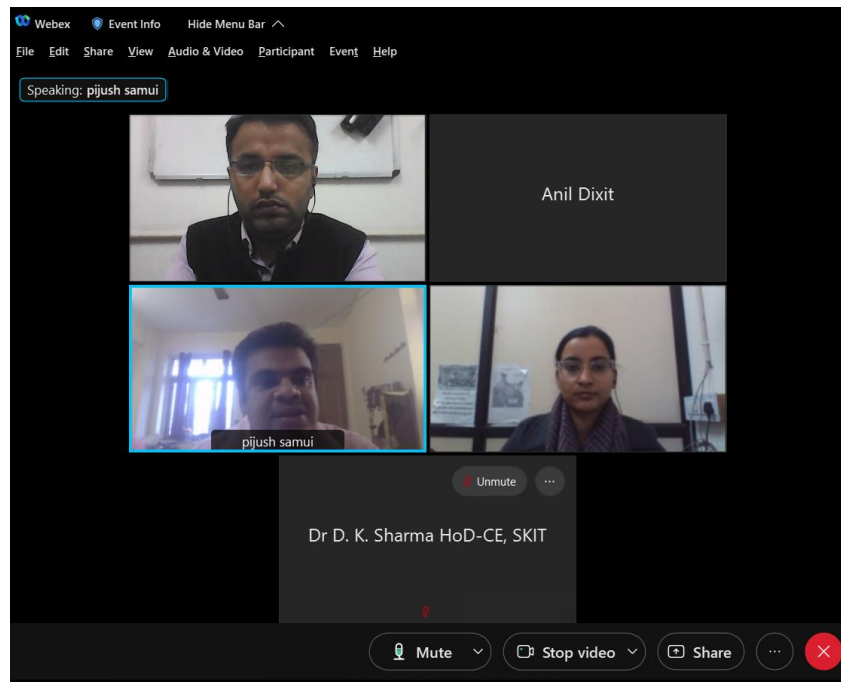


The screenshot shows a Webex meeting interface with a grid of participants. The top bar includes 'Webex', 'Event Info', and 'Hide Menu Bar'. Below this is a menu with 'File', 'Edit', 'View', 'Audio & Video', 'Participant', 'Event', and 'Help'. The main content area displays a grid of four video feeds. The top-left feed shows a slide titled 'Civil Engineering' with 'Me' below it. The top-right feed shows a man speaking, with a 'Speaking: Er Jetender B Jangid' label above him. The bottom-left and bottom-right feeds show two women. The Webex control bar at the bottom includes 'Unmute', 'Share', and a red 'X' icon. The Windows taskbar is visible at the very bottom.

On Day 3, In session 1, Dr. Sarfaraz Khan (University of Florida and Florida Department of Transportation) discussed in detail about the pavement design and evaluation techniques. He explained the case study conducted using Accelerated pavement testing facility (APTF). Second session of the day was conducted by Dr. Nitin Goyal (Principal Scientist and Incharge Mumbai Zonal Centre-NEERI). He elaborated on the impact of transportation on environment by discussing a case study of Mumbai City.



Day 4 started with session of Dr. Pijush Samui (Associate Professor-NIT Patna). He briefed the participants about the use of artificial intelligence in civil engineering. He also told the audience that this is one of the emerging topics and more research is required in this sector. In second session Dr. Anil Dixit (MD-Landmark Testing and Research Laboratory Pvt. Ltd.) delivered a session on basics of geosynthetics. He explained about the tests conducted on geosynthetics before using them in field. He also explained a case study of railway ROB in Sitapura area of Jaipur city.



A screenshot of a Webex video conference interface showing a presentation slide. The top bar is identical to the previous screenshot. The main area displays a presentation slide with the following content:

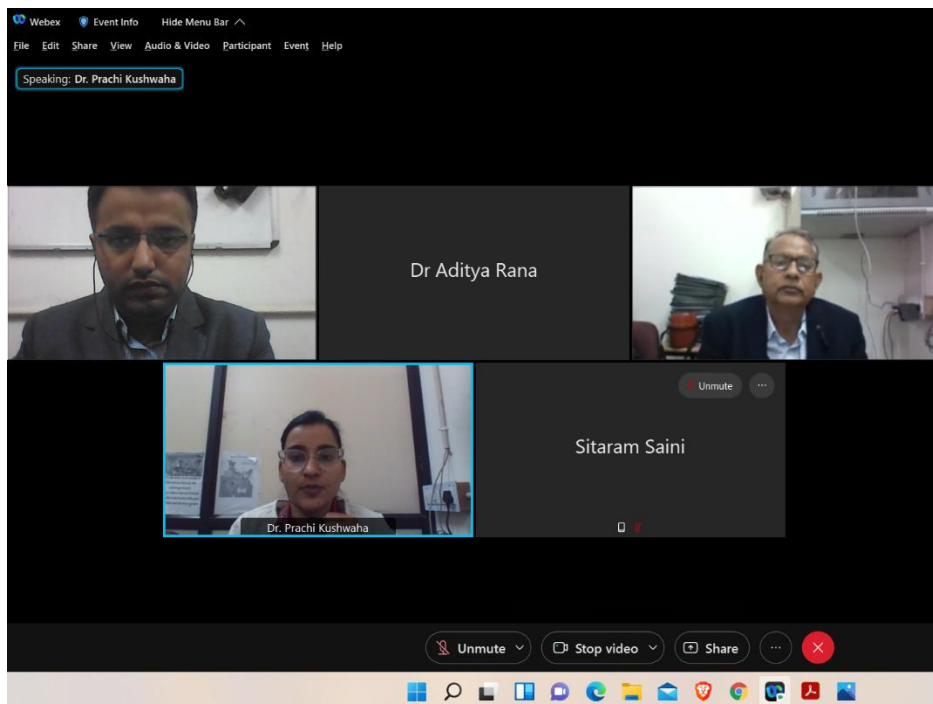
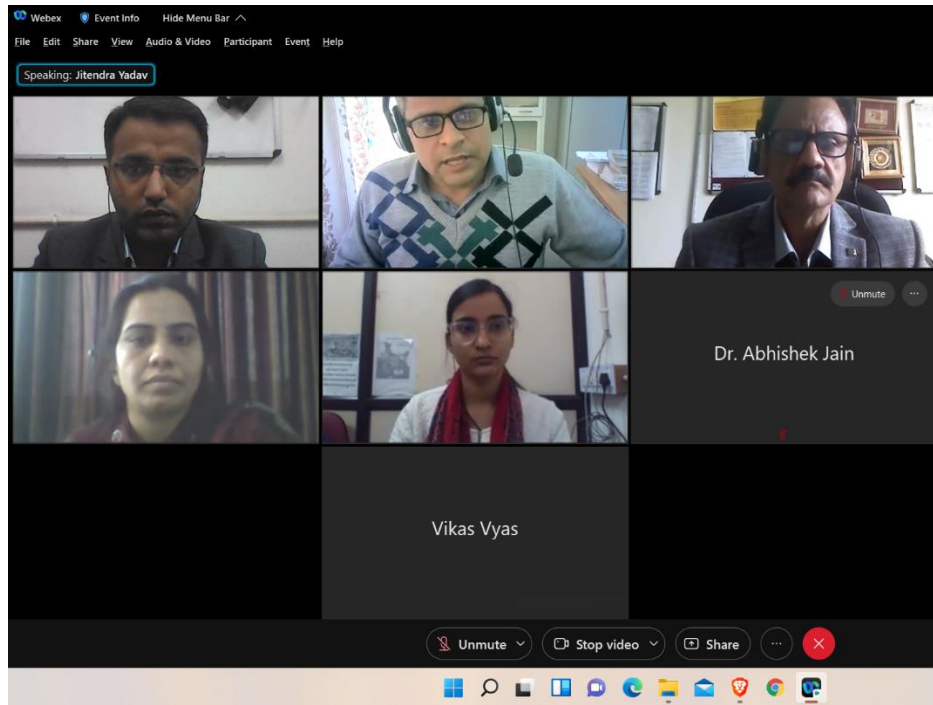
Viewing Anil Dixit's application...

Technical Specifications of Glass Grid

- 1. Tensile strength ASTM D 6637: 100kN/m
- 2. Elongation at break: <5 %
- 3. Mass per unit area ASTM D5261: GSM > 380
- 4. Mesh size : 12.5MM
- 5. Melting point as per ASTM D 276: > 218 DC

At the bottom, there are controls for 'Unmute', 'Start video', 'Share', and a red 'X' icon. The Windows taskbar is visible at the very bottom of the screen.

First session of Day 5 was delivered by Dr. Jitendra Kumar Yadav (Assistant Professor – NIT Hamirpur). He emphasized on utilization of waste materials in construction of road pavements. Last session of the FDP was delivered by Dr. Aditya Rana (Scientist-CIMFR). He delivered his talk on “Current Trends in Control Blasting for Strategic Road and Railways Construction”.



A total of 380+ participants from India and abroad registered for the event.