Department of

Electronics and Communication Engineering

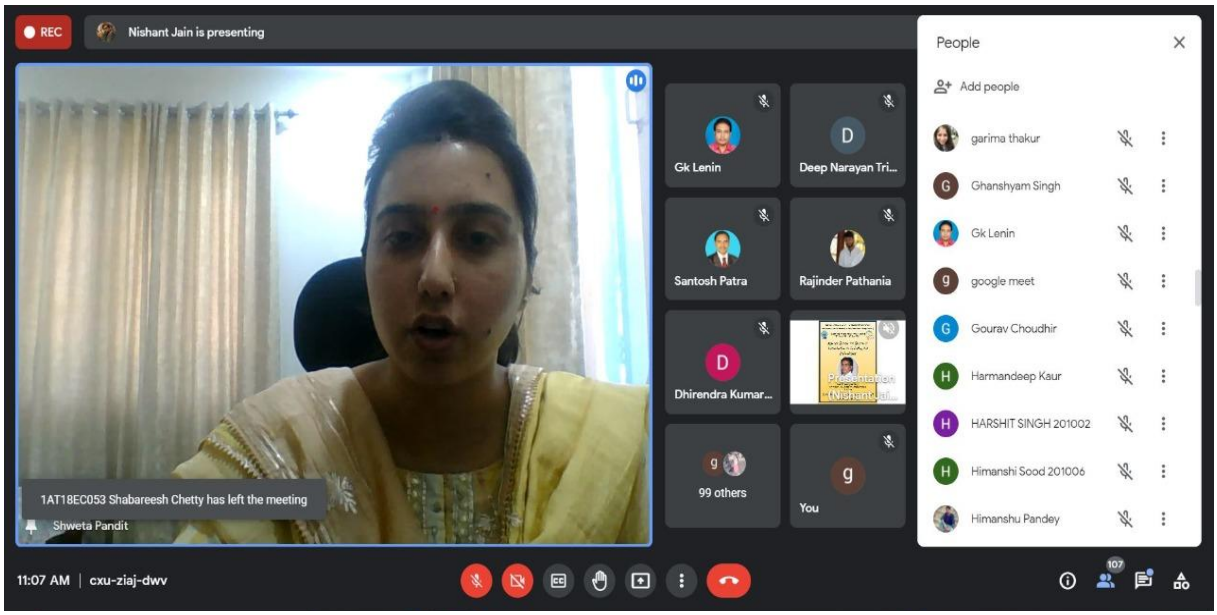
Jaypee University of Information Technology Waknaghat

Event Report: Session-1

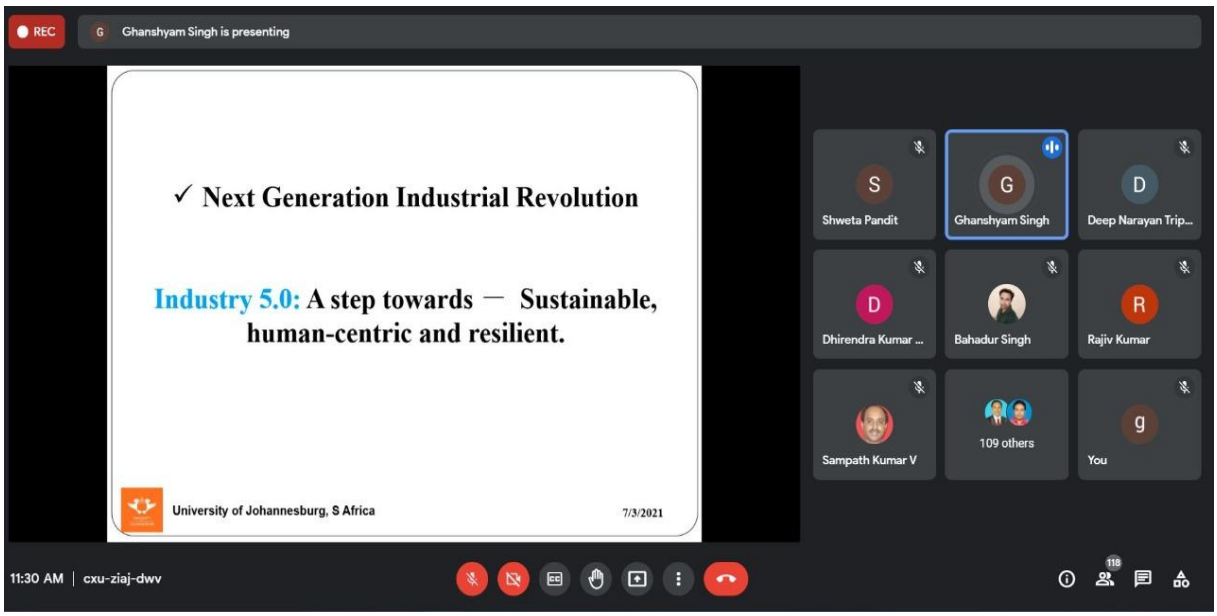
3rd July, 2021

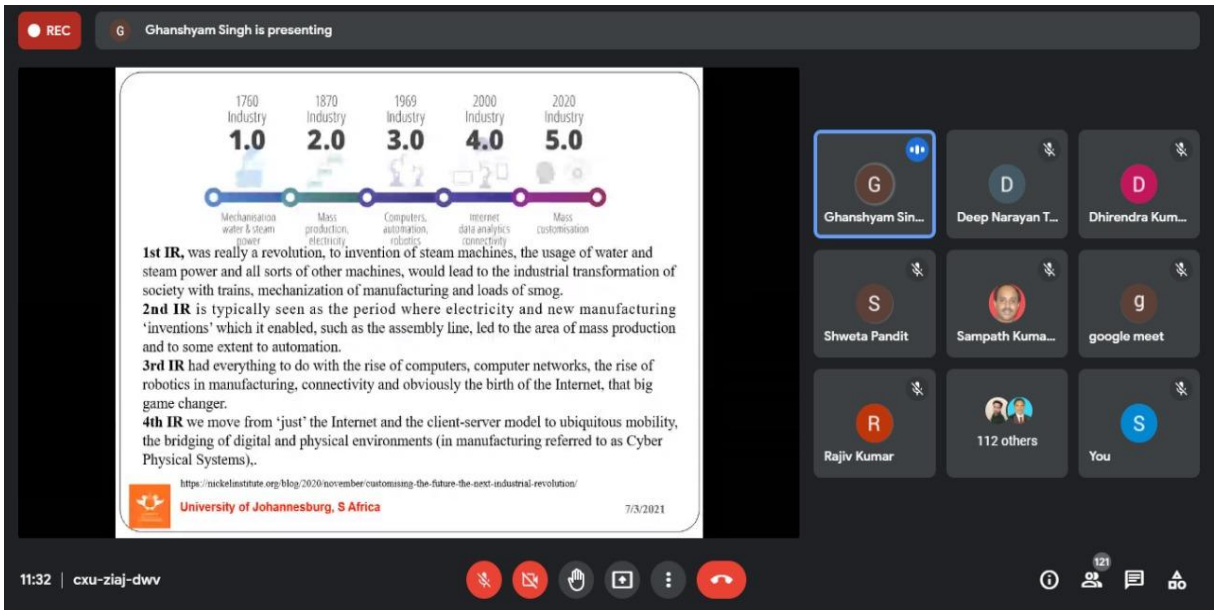
Department of Electronics and Communication Engineering, JUIT Waknaghat is organizing an online workshop on **Industrial Revolution 4.0**, during 3rd July to 4th September, 2021, where the first session was conducted on 3rd July from 11:00 AM – 01:00 PM.

In an effort to inspire and help the participants exploring the new dimension for research and the academic activities, **Dr Shweta Pandit**, **Assistant Professor, Department of Electronics and Communication Engineering** welcomed the gathering and introduced the first session speaker, **Prof Ghanshyam Singh, University of Johannesburg, South Africa.** She also highlighted the importance of the workshop and motivated the participants. She told how **Industry 4.0** '**The Fourth Industrial Revolution'** helps smart factories where cyber-physical systems can monitor the physical processes of the production and make decentralized decisions in real time, which includes technologies like artificial intelligence, robotics, internet of things, 3D printing, genetic engineering, quantum computing and many others.

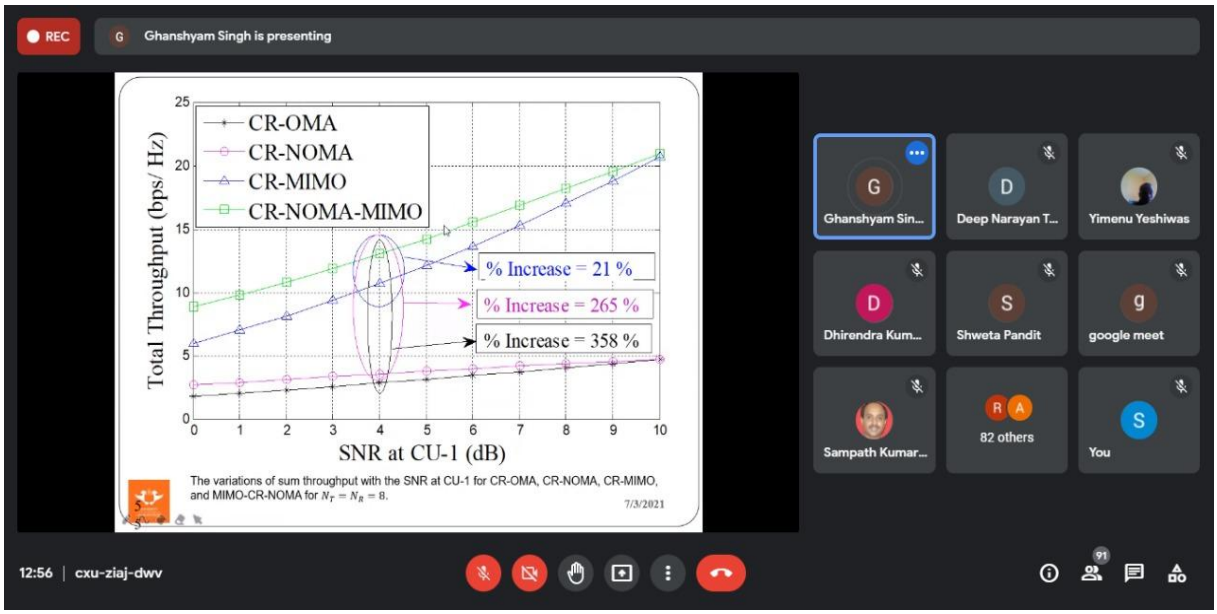


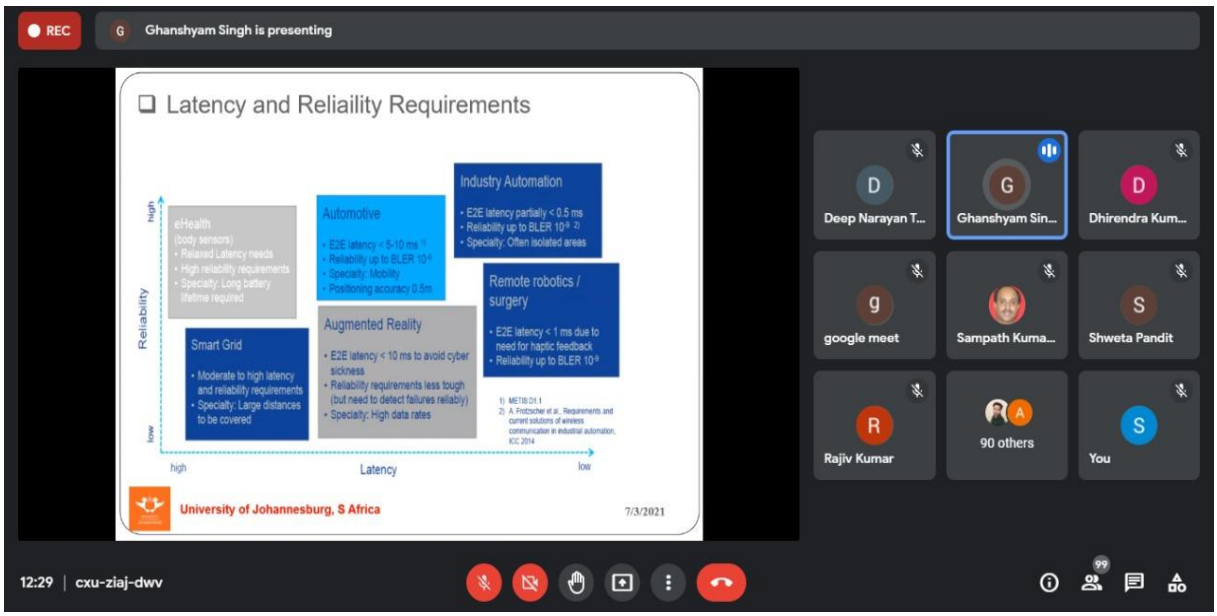
The guest speaker, **Prof Ghanshyam Singh**, highlighted the **Industry 4.0** concept to participants and presented examples of solutions that are altering the manufacturing industry. He gave an overview of recent trends in **Industrial Revolution 4.0 and Revolution 5.0**, **global trends of wireless connectivity, 4G, 5G and 6G Communication Systems and IoT Industry Applications.**





The speaker explained that the **Smart Factory** is an intelligent production system which utilizes the integration of manufacturing services. The main issues of key technologies involved in the **Physical Layer, The Network Layer, and The Data Applications Layer in Smart Factory** are needed to analyse with use cases as the big advances and data based virtual manufactures mode will improve product quality, increase production efficiency and reduce energy production. It was then concluded that the intelligent manufacturing based on big data will lead to **Revolution of Traditional Industry.**





At the end of the session, queries of the participants were answered and feedback collected from participants. The session was well appreciated by the participants.