Webinar on Quantum Computing: Introduction and **Application**

Date: Jan8, 2021

Speaker: Dr. Pranjal Kumar Phukan

The Training and Placement Cell, B.I.T. Sindri, organized a live webinar on "Quantum Computing: Introduction and Application" by Dr. Pranjal Kumar Phukan which focused on introducing the students to the new and rapidly developing field of Quantum Computing and its applications in different sectors. There were nearly 100 attendees of the webinar belonging to different branches and years. The session started with greetings for the new year to all the attendees and a warm welcome was accorded to the honorable guest speaker by Prof. (Dr.) Ghanshyam (TPO). He gave a brief introduction about Dr. Phukan and shared anecdotes of the commendable efforts of the alumni for the benefit of the institute and the students.

After the exchange of greetings and introduction, the session was taken over by the keynote speaker, Dr. Pranjal Kumar Phukan. He began by highlighting the importance of Quantum Computing in tackling modern day challenges. He said that it can be used as an impactful tool in solving problems in lucrative fields such as biotechnology, medicine, blockchain and chemical engineering. To elucidate the differences between quantum computing and classical computing and to make things clearer for students, Dr. Phukan gave a point-to-point comparison between both models. He emphasized that quantum computers are capable of carrying out calculations at a much faster pace which is beyond the ability of classical computers. He explained some salient features like superposition and entanglement. Dr. Phukan explained about the different quantum technologies being used by companies like Google, IBM and Intel. To make students aware of the applications of quantum computing, he cited some industrial applications including quantum simulations, optimisation and quantum AI which are used in drug-development, blockchain and climate forecasting.

At the end of the session, TAP Cell presented a token of gratitude to Dr. Pranjal Kumar Phukan on behalf of the entire BIT fraternity. The session was very insightful which gave the attendees a formidable chunk of knowledge about this very lucrative field of science.



