

Report on Webinar

The faculty of Mechanical Engineering organized a Webinar on **”Heavy Duty Electric and Hybrid Vehicle”** on 10th May 2020 by **Dr. B.N Singh, faculty at North Dakota state university, USA, Senior staff Engineer at John Deere Fargo, North Dakota and Senior member IEEE.**

The session was attended by faculty members and students from various departments of Institute of Technology.

The following are the key points of the Webinar conducted:

1. Dr. Singh said that the rapid consumption of fossil fuel and increased environmental damage caused by it have given a strong impetus to the growth and development of fuel efficient vehicles.
2. Hybrid electric vehicle (HEV) have evolved from their inchoate state and are providing to be a promising solution to the serious existential problem passed to planet earth.
3. Silicon Carbide (SiC) prototype inverter is approx. 1/3rd the size and weight of 400 dual inverter and is designed to set a new benchmark for efficiency and performance.
4. He also told the students that SiC has significant power density, higher efficiency over the entire operating range and improved thermal capabilities due to advanced internal cooling technique.
5. At last he concluded by saying SiC power electronics is real which by 2020 may compete with silicon technology.

The session was nearly about 1 hour and quite interactive where students put forward their technical doubts. Dr. Singh also talked about the change he has seen over 35 years span of his life and suggested the students to keep changing and adopting the technology. He concluded by saying that there are ample jobs for the engineers who are upgrading their knowledge with the time.