OUTEGE OF ENGINEERING OUTEGE OF ENGINEERING

Report on online expert session

<u>on</u>



"Current and Future Research in Power Electronics & Opportunities for Joining the Research Group at I.I.T. Bombay"

Experts: Prof.(Dr.) Sudeep Anand, Associate Professor, EED, IIT Bombay

Date: 20th April 2023, Thursday

Time: 3:30 PM to 5:30 PM

Venue: Chankya Hall, EED,LDCE.

Patron: Prof. (Dr.)R.K.Gajjar, Principal, L.D.C.E.

Mentor: Prof. (Dr.) K.P. Badgujar, H.O.D., E.E.D., L.D.C.E.

Coordinators: (i) Dr. K. A. Bhatt (ii) Prof. H.N. Raval, Assistant

Professors, E.E.D., L.D.C.E.

Student Coordinator: Abhay Gosai

Speakers' introduction:

Sandeep Anand received the B.Tech. and Ph.D. degrees in electrical engineering from the Indian Institute of Technology Bombay, Mumbai, India, in 2007 and 2013, respectively. He had brief stints at Industry, working previously with Emerson Network Power, Mumbai, and Cosmic Circuits Pvt. Ltd., Bengaluru, India. From 2013 to 2019, he was an Assistant Professor with the Indian Institute of Technology (I.I.T), Kanpur, India, where he became an Associate Professor in 2020. He is currently an Associate Professor with I.I.T Bombay, India. He has received "Young Scientist Platinum Jubilee Award" by The National Academy of Sciences, India (NASI) in 2019 & "Young Engineer Award" by Indian National Academy of Engineering (INAE) in 2017. His research interests include Electric Vehicles Power Train including EV Chargers, Reliability of Power Electronic Circuits, Wide bandgap devices (GaN, SiC) based Power Converters and Circuits for Interfacing Alternate Sources of Energy. In the area of electric vehicles, he is supporting various MSME industries in terms of R&D support for their power drive train requirements and also by running skill development courses in this emerging area. More about his publications, projects and research is available at https://www.ee.iitb.ac.in/~sa/

Glimpse of the program:

Initially expert Prof. Dr.) Sudeep Anand was welcomed by our head of department Prof. (Dr.) K.P.Badgujar.



Thereafter, expert has shared his presentation about current and future research in the field of power electronics. He discussed the scope for development of new power electronics devices which require less space and light in weight compared to existing device. He shared few of newly developed devices in his lab at IIT bombay. rof. Sandeep Anand would discuss about some of the advanced research going on in his group. He has developed a group which has strong collaboration with Industry and working closely with them on latest technologies in this area. He will also talk about some of the student's research projects and the mark those have created at international levels. Towards the end he will talk about the research opportunities and openings in these areas at I.I.T. Bombay. This talk would be very useful for the students aspiring to do high quality research at I.I.T. Bombay in future.





The expert elaborated constructional details, characteristics, and performance analysis of commonly used switch gears in the field of electrical engineering. Students have asked lots of

questions about their doubts and expert has given satisfactory answers to them. At last vote of thanks was given by Dr.K.A.Bhatt .



Feedback Analysis









