



IIT Jodhpur Team bags GYTI 2020 Award

Kaushal Desai

News and Views

IIT Jodhpur provides unique opportunities for students during the curriculum by offering a flexible program structure with the right balance of knowledge and hands-on experiences. One of the unique features of the program is to have emphasized design thinking and creativity in education, which enables students in product realization during the curriculum itself. The undergraduate students having interests in such activities are offered a unique option to pursue Engineering Innovation specialization during the final semester of studies. Final year B.Tech. (ME) students of 2016 batch, **Parth Joshi and Poojan Gajjar** opted for the specialization and worked on the Development of Electro-mechanical Muscle Fatigue Measurement Device during their studies. This multi-disciplinary work involved interfacing with Medical Science, Mechanical, and Electrical Engineering. **Dr. Kaushal A Desai, IIT Jodhpur, and Dr. Prathamesh Kamble, AIIMS Nagpur**, mentored the work.

The project aimed at the development of a novel muscle fatigue measurement device that aims at replacing a conventional tool, namely Mosso's Ergograph, used in laboratories. The work aimed at developing a compact electro-mechanical device serving the same purpose with additional features and advantages such as compact size, electronic output, versatility, portability, etc. The work developed an indigenous and ergonomic mechanical structure with Electro-myography (EMG) sensor as a new-generation device. The work has been chosen for the SITARE and SRISTI Gandhian Young Technological Innovation (GYTI) awards 2020. The awards are given each year by Honey Bee Network and Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) to innovative ideas having a significant amount of novelty and social applications. The awards also incentivize students to pursue entrepreneurial ventures wherever possible and also motivate them to develop solutions for unmet social needs.

About the author



Kaushal Desai

Associate Professor

Department of Mechanical Engineering

Webpage (<http://home.iitj.ac.in/~kadesai>)