Hybrid Motor Cycle

This project is led by Dr. Khuram Pervez and followed by one of his MS students, i.e. Mr. Ahsan Arshad, who has been a key member and had been working consistently on this project. Dr. Khuram is serving as Assistant Professor in the Department of Mechanical Engineering of Mirpur University of Science and Technology, AJK, Pakistan with over 17 years' of professional experience in the fields of Energy and Mechanical Engineering. Dr. Khuram is also a Chartered Engineer with UK Engineering Council, Registered Engineer with Pakistan Engineering Council and is a full member of Energy Institute of United Kingdom.

The main objective behind this project was centering on embedding energy efficiency. This hybrid motor cycle can be run on petrol as well as on a battery. Its cost effectiveness, less dependency on fuel and environment friendly features make it a perfect choice for ordinary people of the country. The 1200W hub motor placed in the front wheel takes power from a lithium Ion battery via a controller. On a straight road, 50 km distance could be travelled using this battery with a maximum speed of 45km/hr.

Recently this project, Hybrid Motor Cycle, has gained enormous recognition by researchers as well as by the industrialists during "DICE-2017 Mega Innovation and Entrepreneurship Event" organized by MUST with the collaboration of DICE Foundation, USA. The project was also appreciated by renowned scientist Dr. Samar Mubarakmand during an event organized by Green Society MUST in 2017. The project won 2nd prize in that event.

The research team is working on improving the design and efficiency of this motorbike based on feedback received from the industrial sector. It is also inspiring that the research team is also working to improve the efficiency of its kit which could be easily installed in any other motorbike by minor modifications. Hopefully, this kit will receive very encouraging response from the local motorbike market.