KSCST 38th SPP SERIES PROJECT REPORT

Title: DESIGN OF SOLAR ELECTRIC BIKE

Project Proposal Reference number: 38S0114

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ABSTRACT

Due to constant depletion of the non-renewable fuel sources, there is a need for an alternate renewable source to power our vehicles. Harnessing energy from the sun is a viable option considering the abundant nature of solar radiation. Electric vehicles are the future of transportation and a solar-powered electric bike is our concept of an eco-friendly vehicle of the future.

The present work aims at designing a mechanism to harness solar energy to power an electric bike, chassis of which was provided by Eko vehicles. The bike uses a 48V battery to drive a BLDC motor. Throttle mechanism controls the speed of the motor. It is proposed to install two 40W photovoltaic solar panels on the bike to enable on the run charging of the batteries.