



Department of Electrical Engineering
National Institute of Technology Andhra Pradesh
Tadepalligudem – 534101

Research Project Proposal Sanctioned

Proposal Titled: Development of Five-Level Inverter Fed Direct Torque and Flux Controlled Sensorless Permanent Magnet Synchronous Motor Drive for Torque Ripple Minimization in Hybrid Electric Vehicle.

Project Sanctioned By: Empowerment and Equity Opportunities for Excellence in Science scheme under Science and Engineering Research Board, Department of Science and Technology, Government of India.

Project Summary: The objective of this project is to design and develop a five-level inverter fed direct torque control with space vector modulation of a sensorless permanent magnet synchronous motor drive to minimize the torque and flux ripple, as well as considering the neutral point potential balance, less current and voltage harmonics and also smooth vector switching intended for hybrid electric vehicle applications.

Name of Principal Investigator: Dr. Tejavathu Ramesh

Designation: Assistant Professor,

Department: Electrical Engineering,

Institute: NIT Andhra Pradesh.

Total Cost (in Rs.): 43,79,581/-

Duration in Month: 36

