

ICRERA 2025

**14th INTERNATIONAL CONFERENCE ON RENEWABLE
ENERGY RESEARCH AND APPLICATIONS**

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Paper ID : 414

Paper Title : Experimental Evaluation of Motor Current Harmonics and Core Loss under PAM Inverter Excitation with Different Control Sampling Frequencies

Bio:

Md Yakub Ali Khan is a master's student in the Master of Science program at Shimane University, Japan, specializing in Mechanical, Electrical, and Electronic Engineering. He also holds a Bachelor of Science degree in Electrical and Electronic Engineering from World University of Bangladesh.

My primary research focuses on modeling, simulation, and control of Permanent Magnet Synchronous Motor (PMSM) drive systems for electric vehicles, primarily utilizing MATLAB/Simulink. I focus on designing high-speed disturbance observers (DSOs) to improve PMSM performance, ensuring robustness against load changes and parameter uncertainties. Ultimately, I aim to develop efficient, reliable, and real-time motor drive solutions that support sustainable mobility and future electric vehicle technologies.