

## STUDENT SECTION

# Designing a Virtual Instrument Interface for the Analysis of Start, Normal Operation, and Synchronization of the Induction Machine

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*Abstract*— The paper demonstrates the use of virtual instruments for the analysis of the results of a laboratory experiment on the start, normal operation and synchronization of the asynchronous machine. The start and stabilized regime of the asynchronous machine were measured as a first step. Then a dc generator and the excitation circuit powered by it were coupled to the asynchronous machine and the machine entered the synchronized operating mode. In this mode two different measurements were recorded. The measured values were then displayed by the use of virtual instruments. Additionally, in order to demonstrate the possibilities of the virtual instruments a simulated wattmeter for a mono phased circuit was presented.