

## **CONTROL TECHNIQUE FOR PEMFC BASED ENERGY SYSTEM**

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### **ABSTRACT**

*Fuel cells play an important role in renewable energy systems. It is the main power source for portable and standalone applications. Proton Exchange Membrane Fuel Cell (PEMFC) is the most emerging fuel cell. Variation in input and load results in output variation of PEMFC. So, PI control technique is suggested to control the fuel cell output. This paper focuses on mathematical modelling of PEMFC and applying control technique to overcome the stated problem and demonstration through simulation using MATLAB and Simulink.*

**KEYWORDS:** *PEMFC, MATLAB and Simulink, Renewable Energy Systems, PI*

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