

Operation of PEMFC with the integration of fuel processor

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The deployment of polymer electrolyte membrane fuel cell (PEMFC) requires efficient conversion of fuels to hydrogen in distributed facilities. Hydrocarbon fuels such as gasoline or diesel provide much higher storage densities for hydrogen. Methanol is often considered as an alternative fuel source because it is stored as a liquid and can be reformed to hydrogen at relatively mild conditions. Many researches have focused on the fuel processor based on methanol reforming. However, there are very few tries for the integration of fuel processor with PEMFC. In this study, The influences of the operating condition of fuel processor on the performance of PEMFC were observed. And Polymer Electrolyte Membrane Fuel Cell (PEMFC) was operated with the integration of fuel processor.