

Topic: **Models describing the behavior of polymer electrolyte membrane fuel cell (PEMFC) polarization curve**

Objective: **Literature review**

Polymer electrolyte membrane fuel cell is one of the most promising type of fuel cell in the field of decentralized stationary energy supply systems. PEMFC in combination with renewable energy sources can become a good alternative to diesel generators in isolated residential areas. In order to estimate the performance of fuel cell stack one should build the polarization curve of a single cell. By looking on this curve one can understand how to improve the performance of the system and choose appropriate operational conditions. In this topic different types of voltage losses and methods to mitigate them will be discussed.