

Bi-Weekly Staff Meetings

Date: 9/30/2014

Team Number: 10

Students' Names: Collin Heiser, Bryan Anderson, Mustafa Nek, James Richardson, Nicole Alvarez, Nicolas Shultz

Mentors/ Coordinator/ Sponsor: Juan Ordonez, Jose Vargas/ FIPSE/UFPR

1. Project Title: Educational Kit using an Alkaline Membrane Fuel Cell

2. Project Objectives: Design and develop an alkaline membrane fuel cell educational kit for high school and college level laboratory demonstration, and submission of a utility model request in the US and in Brazil of the developed educational kit system.

3. What was accomplished the last two weeks on individual tasks? (Please include representative data and supporting documents.) We have constructed a starting budget of the overall costs of the project. Also, we have discussed a proper size to make the fuel cell as well as some the machining required to make these dimensions possible. This Thursday we will be going to the lab in the CAPS building to view a larger scale model of the fuel cell being used.

4. Summary of problems encountered and actions taken (and by whom): Currently no problems.

5. Work planned for the next period and the person(s) responsible: Our current goal is to discuss the specific ratios of KOH and H₂O needed to maintain a proper power input. Also, we need to figure out the proper pressure ratios of hydrogen and oxygen that are needed to avoid damaging the electrode paper. Further discuss with Brazil team to determine if the values that we calculate are similar to what they have calculated. If everything goes smoothly begin ordering required materials for prototype construction.

7. Open comments/suggestions: There are no comments or suggestions at this time.