**Weekly Report (02-11-2013):**

In the past week the group has made some progress with building the buck converter, testing the rectifier, testing the SSR, and obtaining battery details.

Derek, Matt and Nick worked to test the rectifier and finally got the basic buck converter design working during testing. Brandon worked on testing the SSR and discovered that without the 5VDC, the AC signal is still passing through it. Eventually the SSR testing was successful and a document was written as instruction to get the circuit to work. Matt and Derek discussed the possibility of using the restricted lab to apply a variable load to simulate Lithium-ion charging using a higher rated motor. So there is a possibility of testing with a high current system. A logic flow chart was created to assist Hamzah and Abdulaziz with their microcontroller programming. Nick and Derek determined Arduino pin requirements, cooling issues, and weight calculations.

Next week’s Goals:

* Gets the temperature sensor to work.
* Make sure that the temp sense can interface through the Bluetooth.
* Work on a filter system for the buck converter.
* Find out how to gain access to restricted labs and apply for access.
* Create logic flow chart to help with the microcontroller work.
* Verify that the Arduino can control the SSR.