# OCV Measurement and Hysteresis

## SAMPLE PROBLEM 1

Q.1.

For the folder provided consists of the OCV Test done on a cell marked as – A123. The cell has been tested for 4 stage OCV test at different temperatures of

|  |  |
| --- | --- |
| S.No. | Temperature |
| Test 1 | -25 |
| Test 2 | -15 |
| Test 3 | -05 |
| Test 4 | 05 |
| Test 5 | 15 |
| Test 6 | 25 |
| Test 7 | 35 |
| Test 8 | 45 |

1. For each stage of each test plot the separate graphs for voltage change vs SOC of the cell.
2. For each test plot a common graph for charge and discharge voltage vs SOC of the cell.
3. Calculate the average voltage value for each step of test data, and plot a graph against SOC.
4. Calculate the hysteresis voltage of the cell at SOC range and compare the data using graphical method.

*For this cell the test has been performed at different temperatures as indicated by folder name – A123\_OCV\_NXX or PXX. One with prefix N – is negative temperature and one with prefix P is positive temperature. A123\_OCV\_N05 – this is for negative 5 degrees. A123\_OCV\_P05 is for positive 5*