

## **Technical specifications for potentiostat:**

The instrument should have following capabilities to measure cyclic voltammetry, cyclic charge-discharge, impedance measurements, and other electrochemical properties.

### **Essential requirement:**

1. Measureable voltage window: Lower voltage: 0 V, higher voltage: at least 30 V
2. Scan rate capability: minimum: 1 mV/s, maximum (at least) 10000 V/s
3. Output current: minimum 10 pA, maximum (at least) 3 A.
4. Frequency range: minimum: 1 mHz, maximum (at least) 1 MHz
5. Power ratings: 240 V AC, 50 Hz
6. Noise level in the data should be less than 10  $\mu$ V rms
7. Measurements and parameter to be controlled with the latest software interfaced to computer or laptop through USB cable
8. Electrochemical standard cells with standard electrodes
9. It should have options of cell connections of 2, 3 or 4 electrodes.

### **Optional requirement:**

1. Data acquiring capacity i.e. has to be less than 1 micro second.
2. There has to be an option of current or power booster as an extra accessories.
3. Should have provision for electrical isolation from earth ground
4. Two additional software licenses are required