1. Equipment: **Semiconductor parametric analyzer  (Keithley 4200 SCS/** **Agilent B1500A)**
2. Indentor: **Dr Shiv Govind Singh/ Dr Ashudeb Dutta**
3. Past users (departments):

**Electrical Engineering**

**Physics**

1. Preference of slot types (mention minimum time required for one time use):
2. Hours: **2 hours**
3. Samples: **Variable**

Rs 300/2hrs slot

1. Target groups: **PhD Students**
2. Number of minimum students need to be trained: **One student from each user department**
3. How would you like to train the students/staffs?

(Please mention the approximate training duration too)

**Dedicated training sessions can be conducted by already trained users for training the new perspective users. The sessions can be conducted in slots of 2 hours per session, for a total duration of 8-10 hours.**

1. Samples/materials allowed in the equipment:

**2-probe device characterization: IV/CV Measurements with Keithley 4200 SCS Semiconductor parametric analyzer and Agilent B1500A Semiconductor parametric analyzer, Nano-device characterization (IV Measurement of Nanowires)**

**(Note: Both Sweeping and Sampling mode analysis for IV measurements)**

**(Note: Minimum frequency for CV measurements is 10 KHz)**

**Voltage range: -20 V to 20 V**

**(External Test kit available for CV measurements in the range of -200 V to 200 V )**

**4-probe Measurements for semiconductor parametric analysis (Currently under upgradation)**

1. Restricted materials/samples in the equipment:

**Samples with improper electrical contacts/ samples that require probing on both top and bottom surfaces/ Samples involving any toxic or harmful materials not meeting proper safety precautions**

1. Tentative cost per slot/sample:

(Please give a reasonable estimate comparing the instrument costs with other facilities at other IITs/Research centers)

Rules and guidelines:

Please contact the concerned operator for queries related to the samples.