

Characteristic Curve Data

To obtain the characteristics curve of the Geiger muller counter we vary the voltage over a range, from $0V$ to $1300V$ till the first point of continuous discharge. The data has been provided in the supplementary.

Characteristic Curve Plot

Here is the characteristic curve plot for the GM counter using a sodium source.

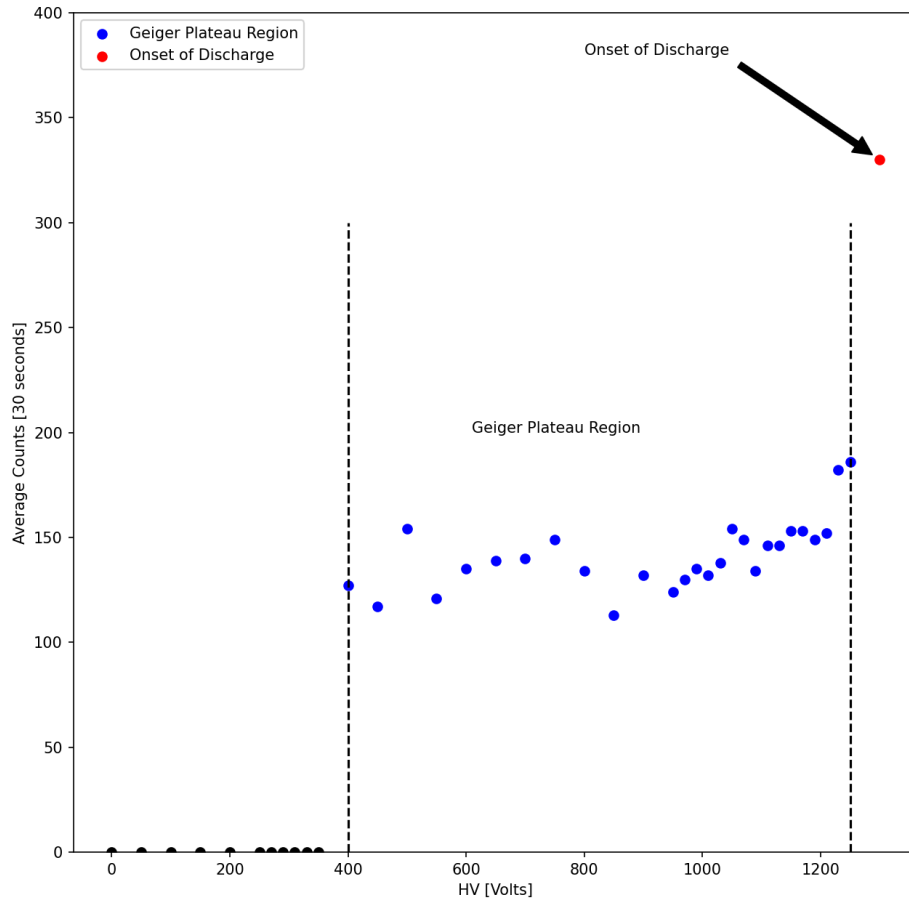


Figure 1: Geiger Muller Characteristics curve

We set the operating voltage of the Geiger Muller counter in the mid point of the Geiger Muller Plateau , which is given by

$$V_{op} = \frac{400 + 1250}{2} V = 825V$$

The second part of the experiment was counting statistics for GM counter, which was done at the operating voltage of $V_{op} = 825V$