

Technical Data

GM Experiments Tutor is a comprehensive self learning software, designed to be student friendly. Primarily it is designed to illustrate various GM Experiments –Theory, Physics principles involved, facilitating one to go through & carryout the experiments in the lab. It enables data entry, calculations & plotting of graphs etc pertaining to each of the experiments done. It facilitates one to learn Physics in computer friendly environment. Experiments that are covered are given below along with few of the screens.

- Study of the characteristics of a GM tube and determination of its operating voltage, plateau length / slope etc.
- Verification of Inverse Square Law for g rays.
- Study of nuclear counting statistics.
- Linear & Mass attenuation co-efficient using gamma source (for Aluminium, Lead & Copper).
- Estimation of Efficiency of the G.M. detector for
 a) Gamma source
 b) Beta source.
- To Study Beta Particle Range and Maximum Energy.
- Measurement of short half-life.



1. The main screen of the GM TUTOR is shown below, which indicates the list of Experiments.

2. On selecting Experiment, the following window will be shown which shows the theory for that experiment

3. Various pages can be viewed by clicking on sub-chpater titles on left panel. Experimental theory also includes the typical values, graph & computations



4. After going through the theory , Data Entry can be done using the below screen .



5. The screen below shows graph for the entered values.