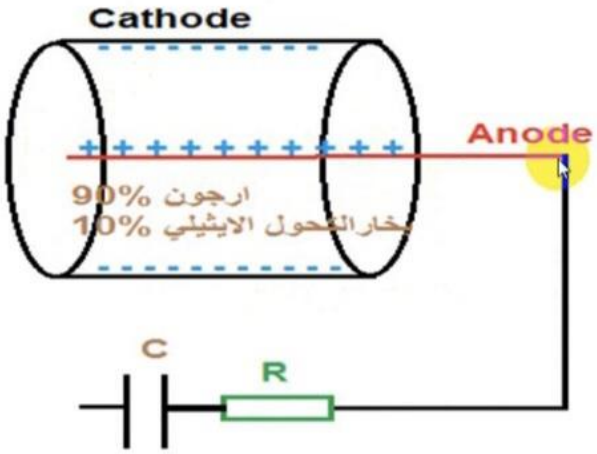
Geiger–Müller Counter

A Geiger counter (also known as a Geiger–Müller counter) is an electronic instrument used for detecting and measuring ionizing radiation. It is widely used in applications such as radiation dosimetry, radiological protection, experimental physics and the nuclear industry .

تركيب عداد جايجر



The principle of Kicker tube detection depends on the ionization of the gas atoms in the Kicker tube (air or arcon with a little organic gas such as ethyl alcohol) under pressure. Its amount is a few centimeters of mercury. We shed a certain potential difference between the wire and the walls of the cylinder. When a gamma or minute photon (alpha, beta) enters through the very thin (mica) window, we notice that no pulses are recorded by the counter due to the lack of potential difference and insufficient voltage to separate the electron from the positive ion and after ionization and the increase in voltage To reach an appropriate voltage, the gas in its path is ionized and the resulting ions move rapidly due to the electric field, so

that the positive (+) ions are directed towards the surface and negative ions (electrons) towards the inner wire, which represents the positive electrode. Very quickly, so it is a reason to charge the damaged channel. Let the wishes of the filter be the channel channel.