

2/10/21

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The structure of atoms.

1. Mention any three properties of electrons?

Ans) Property 1: Electrons are -ve charged particles.

Property 2: The mass of the electron is $1/2000$ times lesser than the mass of proton and neutron.

Property 3: An electron has an electric charge of 1.602×10^{-19} which is equal and opposite to the charge of a proton.

2. Explain how was protons discovered?

Ans) In 1909 Rutherford discovered proton in his famous gold foil experiment. He bombarded alpha particles on an ultrathin gold foil.

Based on Wilhelm Wien's theory, who in 1898 discovered the proton in streams of ionized gas Rutherford postulated the hydrogen nucleus to be a new particle in 1920, which he called proton.

Q3. Who discovered neutron?

Ans) Chadwick discovered neutron.

Q4. What is canal ray?

Ans) Rays which travel in a direction away from anode towards cathode when gas is taken in a discharge tube is subjected to the action of high voltage under low pressure.