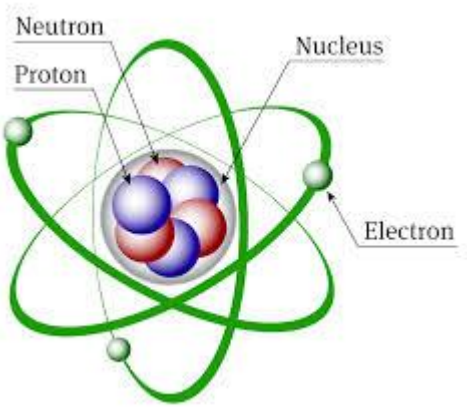
NUCLEAR MODEL OF AN ATOM

PLUM PUDDING MODEL

J J Thomas in 1897 proposed an atom consisting of + electric field with electrons embedded like plum embedded . Therefore it is called **plum pudding** model of the atom. Model is a theory and it has to be supported by experiment afterwards by results. In this result of alpha particle scattering could not be explained. So this model was unsuccessful.

RUTHERFORD'S ATOMIC MODEL

In Rutherford's proposal of an atomic model the electric charge +Ze is an atom concentrates in a small area. The +Ze is localised to be a cluster and the alpha particle is scattered by coullomb's repulsive force between charge of the alpha particle +2e and that of cluster +Ze. This cluster +ze is called atomic nucleus or nucleus. This is called Rutherford's nuclear atomic model.



Rutherford's nuclear atomic model

He assumed total +charge in an atom, +Ze concentrate on Nucleus and the incident alpha particle is scattered with repulsive coulomb force. Excerted by the nuclear point charge the coulomb scattering or rutherford's scattering.