TODAY IN CHEMISTRY HISTORY

30TH APRIL – THE DISCOVERY OF THE ELECTRON (1897)



SIR JOSEPH J THOMSON

BORN

18 December 1856

DIED

30 August 1940

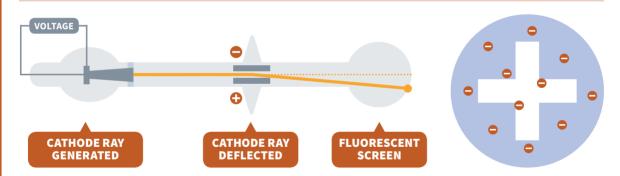


1906



Thomson discovered the electron, found the first evidence for isotopes of stable elements, and won the Nobel Prize in Physics for 'investigations on the conduction of electricity by gases'.

ELECTRONS & THE 'PLUM PUDDING' MODEL OF THE ATOM



Thomson generated a cathode ray in a tube with a partial vacuum. He showed the rays were deflected by an electric field. Comparing this with how much they were deflected by a magnetic field, he deduced that cathode rays were made of negatively charged particles, which he termed 'corpuscles'. The discovery led to his 'plum pudding' model of the atom, with electrons scattered throughout a cloud of positive charge.



