



THE HISTORY OF THE ATOMIC ERA, RADIOLOGY, AND ATOMIC ENERGY IN PHILATELY



The link between electricity and magnetism was discovered by Hans Oersted (1777-1851), when he found that an electric current had magnetic effects. And André Ampère (1775-1836), the French mathematician and physicist, ranks among the foremost investigators of electricity and magnetism by mathematically formulating the discoveries of Oersted.

Hermann von Helmholtz (1821-1894), a German physicist, mathematician, anatomist and physiologist, advanced the theory of electricity in his law of Conservation of Energy: "Energy is indestructible and may be transferred, but is never lost or destroyed" -- a law which represented the first lucid and definitive interpretation of an idea that had only been hinted at by earlier scientific workers. In 1892, an assistant of Helmholtz, Heinrich Hertz (1857-1894), conducted a number of experiments which led him to conclude that a stream of cathode rays could pass through the glass wall of a vacuum tube. Hertz believed cathode rays to be a form of radio or electromagnetic waves.

There are many scientists who helped to prepare the way for Röntgen's discovery and who have not yet been honored by commemorative philatelic issues. Michael Faraday (1791-1867) in 1837 conducted research on the luminous effects of passing an electric current through various gases. In addition, he was the first to demonstrate the phenomenon of electromagnetic induction in 1831.