



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



Sir Isaac Newton (1642-1727) utilized the achievements of scientists and mathematicians such as Descartes to transport science across the threshold of the modern era. In his great book "Principia", he maintained that atoms are linked together by a force analogous to magnetism or gravity: "Every particle of matter in the universe is attracted by every other particle in the universe". And in the field of electricity, Newton built a more efficient electrostatic generator with a rotating glass sphere.

Yet until the beginning of the next century, all such theories on the origin and constitution of matter resided wholly in the realm of somewhat vague philosophical concept. The distance between metaphysical atomism and the scientific foundation of the atomic theory was spanned by the chemists of the 18th and early 19th centuries, when the laws governing the combination of chemicals were established. Support for a validly scientific atomic theory was provided by the great French chemist Antoine Lavoisier (1743-1794) in his Law of Mass Conservation, obtained by skillful use of the chemical balance. Now the chemical revolution had commenced to dispell the mysteries of matter, and in 1789 the modern concept of elements was conceived by Lavoisier. Discarding older theories, he established the fact that an element was an indivisible kind of matter which could not be spit into something simpler by any known means.