

CHEMISTRY INNOVATIONS

A Chronological Record of Chemical Milestones

1789

Elementary Treatise on Chemistry

Antoine Lavoisier publishes the first modern list of elements and establishes the Law of Conservation of Mass, shifting chemistry from alchemy to a rigorous science.

1803

Modern Atomic Theory

John Dalton proposes that elements consist of indivisible atoms and that compounds are formed by combinations of these atoms in specific ratios.

1869

The Periodic Table

Dmitri Mendeleev organizes known elements by atomic weight, successfully predicting the properties of undiscovered elements.

1909

Haber-Bosch Process

Fritz Haber and Carl Bosch develop a method for large-scale nitrogen fixation, revolutionizing global agriculture through synthetic fertilizers.

1953

The Structure of DNA

James Watson and Francis Crick, utilizing Rosalind Franklin's data, reveal the double helix structure, bridging chemistry and genetics.

2012

CRISPR-Cas9 Gene Editing

Jennifer Doudna and Emmanuelle Charpentier develop a biochemical method for high-precision genome editing.