

Marie Skłodowska - Curie (1867-1934) Marie Skłodowska Curie was a Polish and naturalized-French physicist and chemist who conducted pioneering research on radioactivity. She was the first woman to win a Nobel Prize, the first person and only woman to win the Nobel Prize twice, and the only person to win the Nobel Prize in two scientific fields.

Early Life and Education Born on November 7, 1867, in Warsaw, Poland (then part of the Russian Empire), Marie was the youngest of five children in a family that valued education despite financial difficulties. When Poland's universities wouldn't admit women, Marie and her sister Bronisława made an agreement to support each other's education. Marie worked as a governess to finance her sister's medical studies in Paris, with the understanding that her sister would later support her.

In 1891, Marie finally moved to Paris to study physics and mathematics at the University of Paris (Sorbonne). She completed her master's degree in physics in 1893 and earned another degree in mathematics the following year.

Scientific Achievements **Discovery of Radioactivity:** Working with her husband Pierre Curie, Marie discovered the elements polonium (named after her native Poland) and radium in 1898. **Isolation of Radium:** After Pierre's death, Marie succeeded in isolating radium in its pure metallic state in 1910. **Mobile X-ray Units:** During World War I, Marie developed mobile X-ray units to assist with treating wounded soldiers on the battlefield. **Nobel Prizes** 1903: Nobel Prize in Physics (shared with Pierre Curie and Henri Becquerel) for their work on radiation phenomena 1911: Nobel Prize in Chemistry for the discovery of the elements polonium and radium, and the isolation of radium **Personal Life** Marie married Pierre Curie, a fellow physicist, in 1895. They had two daughters, Irène (who also won a Nobel Prize in Chemistry with her husband) and Eve. After Pierre's accidental death in 1906, Marie took over his teaching position at the Sorbonne, becoming the first female professor there.

Legacy and Death Marie Curie's work was crucial for the development of X-rays in surgery and cancer treatments. Despite her accomplishments, she faced significant gender discrimination throughout her career. She founded the Curie Institutes in Paris and Warsaw, which remain important centers of medical research today.

Unaware of the dangers of radiation exposure, Marie carried test tubes of radioactive isotopes in her pockets and stored them in her desk drawer. The prolonged exposure to radiation caused her to develop aplastic anemia, leading to her death on July 4, 1934. Her papers from the 1890s are still so radioactive that they are kept in lead-lined boxes, and those who wish to view them must wear protective clothing.

Marie Curie's life and work continue to inspire generations of scientists, particularly women in STEM fields. Her dedication to science, selfless nature, and determination in the face of adversity cement her as one of history's most influential scientists.