

BIOGRAPHY ON MARIE CURIE

Nearly 250 years after she was born, Marie Curie (Maria Skłodowska) is still the best known woman scientist ever, even in the 21st century. Born in Poland, she moved to France at the age of 24 and subsequently took up French citizenship. Her life showed complete dedication to the cause of science even in the midst of trying personal tragedies. Her name will always be associated with the field of radioactivity. The first person to receive Nobel Prize on two different occasions and for two different sciences, Marie Curie was awarded the Nobel Prize for Physics in 1903 and for Chemistry in 1911. She was also Pioneer in terms of the first female Professor at the Sorbonne in Paris. She founded the Curie Institutes in Paris and Warsaw. Remarkably she was the wife of a fellow Nobel laureate, Pierre Curie, and her daughter, Irène Joliot-Curie, who became the third Nobel laureate in their family.

Early Life

Marie Curie was born on Nov. 7, 1867, The youngest of five children, she had three older sisters and a brother. Her parents – father-Wladislaw, and mother-Bronislava – were educators who ensured that their girls were educated as well as their son.

Curie's mother succumbed to tuberculosis in 1878. In Barbara Goldsmith's book "Obsessive Genius'', she notes that Curie's mother's death had a profound impact on, fueling a life-long battle with depression and shaping her views on religion. Curie would never again "believe in the benevolence of god," Goldsmith wrote.

In 1883, at the age of 15, Curie completed her secondary education, graduating first in her class. Curie and her older sister, Bronya, both wished to pursue a higher education, but the University of Warsaw did not accept women. To get the education they desired, they had to leave the country. At the age of 17, Curie became a governess to help pay for her sister's attendance at medical school in Paris. Curie continued studying on her own and eventually set off for Paris in November 1891.

When Curie registered at the Sorbonne in Paris, she signed her name as "Marie" to seem more French. Curie was a focused and diligent student, and was at the top of her class. In recognition of her talents, she was awarded the Alexandrovitch Scholarship for Polish students studying abroad. The scholarship helped Curie pay for the classes needed to complete her licianteships, or degrees, in physics and mathematical sciences in 1894.

How Radioactivity was Discovered

The term radioactivity was actually coined by Marie Curie, who together with her husband Pierre, began investigating the phenomenon recently discovered by Becquerel. The Curies extracted uranium from ore and to their surprise, found that the leftover ore showed more activity than the pure uranium. They concluded that the ore contained other radioactive elements. This led to the discoveries of the elements polonium and radium. It took four more years of processing tons of ore to isolate enough of each element to determine their chemical properties.