

# TWELVE FAMOUS FEMALE CHEMISTS

March 8 is International Women's Day. This graphic takes a look at a selection of women who have been pioneers in the history of chemistry!



**MARIE-ANNE PAULZE LAVOISIER**  
BORN 1758 DIED 1836

Married chemist Antoine Lavoisier and received training in chemistry. Worked with Lavoisier editing and drawing his methods so they could be understood.



**MARIE SKŁODOWSKA CURIE**  
BORN 1867 DIED 1934

Carried out pioneering research on radioactivity. The first woman to win a Nobel Prize, and the only person to win a Nobel Prize in two different sciences.



**ALICE AUGUSTA BALL**  
BORN 1892 DIED 1916

Developed an injectable oil which was the most effective treatment for leprosy until the 1940s. She died before the results of her work were published.



**GERTY THERESA CORI**  
BORN 1896 DIED 1957

Helped establish how glycogen is broken down in muscles then remade and stored as an energy source (the Cori Cycle). She jointly won a Nobel Prize for her work.



**IDA EVA NODDACK**  
BORN 1896 DIED 1978

She was the first person to propose the idea of nuclear fission, which she suggested in 1934. She was also the co-discoverer of rhenium, in 1925.



**IRÈNE JOLIOT-CURIE**  
BORN 1897 DIED 1956

Daughter of Marie Curie. A joint Nobel Prize in Chemistry winner in 1935 with Frédéric Joliot-Curie for their discovery of and work on artificial radioactivity.



**KATHLEEN LONSDALE**  
BORN 1903 DIED 1971

Pioneered use of X-rays to study crystals, and also used the technique to confirm that a benzene ring is flat. A form of carbon, Lonsdaleite, is named after her.



**DOROTHY MARY HODGKIN**  
BORN 1910 DIED 1994

Used X-ray crystallography to determine the structure of vitamin B<sub>12</sub>, for which she won a Nobel Prize. She went on to decipher the structure of insulin.



**GERTRUDE BELLE ELION**  
BORN 1918 DIED 1999

Developed numerous drugs, including the first immunosuppressive drug used for organ transplants. Jointly won the 1988 Nobel Prize in Medicine or Physiology.



**ROSALIND FRANKLIN**  
BORN 1920 DIED 1958

Made X-ray diffraction images of DNA, crucial in allowing DNA's structure to be discerned. This contribution wasn't fully acknowledged until after her death.



**MARIE MAYNARD DALY**  
BORN 1921 DIED 2003

Thought to have been the first Black American woman to earn a PhD in chemistry, in 1947. She later researched effects of cigarette smoke on the lungs.



**STEPHANIE KWOLEK**  
BORN 1923 DIED 2014

Developed the polymer Kevlar and won many awards for her work on polymer chemistry. Also developed the 'nylon rope trick' chemistry demonstration.

