

# WOMEN IN CHEMISTRY HISTORY



**RONA ROBINSON**  
BORN 1884 DIED 1962

The first woman in the UK to gain a first-class degree in chemistry. She later carried out research on dyes, and was also a campaigner for women's suffrage.



**REBECA GERSCHMAN**  
BORN 1903 DIED 1986

The first scientist to suggest that oxygen free radicals damage cells and cause cell ageing. She was nominated for a Nobel Prize but died before being considered.



**RUBY HIROSE**  
BORN 1904 DIED 1960

Carried out research on serums and antitoxins. Her work contributed to the development of an effective polio vaccine, leading to its near-eradication.



**MARY ELLIOTT HILL**  
BORN 1907 DIED 1969

Thought to be the first African American woman to be awarded a master's degree in chemistry. With her husband, Carl McClellan Hill, developed ketene synthesis.



**MILDRED COHN**  
BORN 1913 DIED 2009

Used nuclear magnetic resonance to study the reactions of enzymes and proteins in the human body, particularly focusing on the reactions of ATP.



**ASIMA CHATTERJEE**  
BORN 1917 DIED 2006

The first woman to receive a doctorate at an Indian university. Carried out research on plant-derived medicines, leading to anti-epileptic and anti-malarial drugs.



**KATSUKO SARUHASHI**  
BORN 1920 DIED 2007

Carried out research showing that seawater releases more carbon dioxide than it absorbs, and also identified radioactive isotopes in seawater due to nuclear testing.



**HELEN MURRAY FREE**  
BORN 1923 DIED 2021

Worked on the development of test strips for diseases, including urine analysis 'dip and read' test strips for UTIs, diabetes and kidney disorders.



**EVAGELINA VILLEGAS**  
BORN 1924 DIED 2017

Worked with Surinder Vasal to improve the amino acid content of maize, making it more nutritious. They were awarded the World Food Prize for their work.



**ALMA LEVANT HAYDEN**  
BORN 1927 DIED 1967

Amongst the first African American scientists to work at the US Food & Drug Administration, where she uncovered Krebiozen as a sham cancer treatment.



**BETTYE WASHINGTON GREENE**  
BORN 1935 DIED 1995

Researched latex and polymers at Dow Chemical, which led to several patents. She was the first black woman to work in a professional position at the company.



**MARGARITA SALAS**  
BORN 1938 DIED 2019

Discovered an enzyme which can amplify DNA samples, making them large enough for analysis, with important applications in forensics and medical testing.