TWELVE WOMEN IN CHEMISTRY

CAROLYN BERTOZZI
CHEMICAL BIOLOGIST

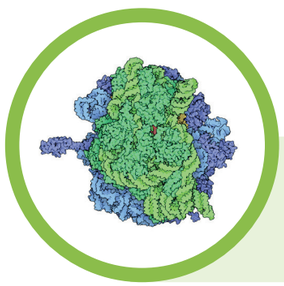
Bertozzi researches the role of sugars on the surface of cells in diseases such as cancer, and develops technology to advance biomedical research.

DARLEANE HOFFMAN
NUCLEAR CHEMIST

Hoffman was one of the researchers who confirmed the existence of element 106, Seaborgium. She also captured and analysed elements heavier than uranium.

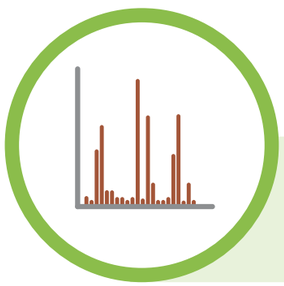
JENNIFER DOUDNA
MOLECULAR BIOCHEMIST

Doudna was a leading figure in the development of CRISPR gene editing, technology that could in future lead to treatments for a range of diseases.



ADA YONATH
CRYSTALLOGRAPHER

Yonath's research on the structure of the ribosome, which helps cells build proteins, won her a Nobel Prize. She also worked on modes of action of antibiotics.

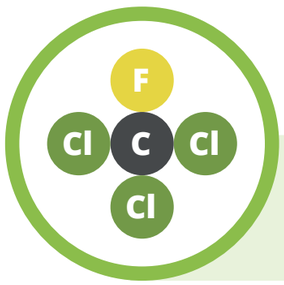


CAROL ROBINSON
PHYSICAL CHEMIST

The first female chemistry professor at both Cambridge and Oxford University. Uses mass spectrometry to reveal the structure and reactivity of proteins.

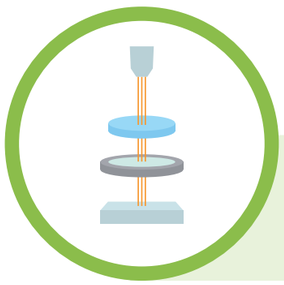
TU YOUYOU
PHARMACEUTICAL CHEMIST

Won a Nobel Prize in Medicine for her discovery of artemisinin, a compound derived from the wormwood plant and used as an drug to treat malaria.



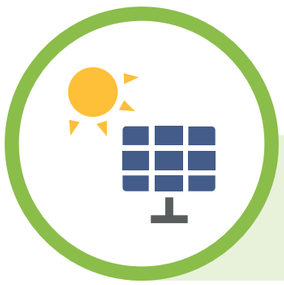
SUSAN SOLOMON
ATMOSPHERIC CHEMIST

Solomon's work helped confirm that chlorine-containing compounds deplete ozone, and explained why this depletion was focused over the Earth's poles.



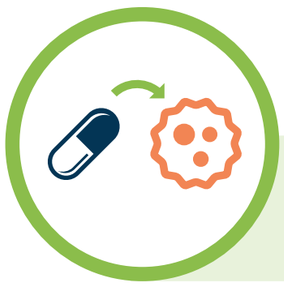
PRATIBHA GAI
MATERIALS CHEMIST

Gai co-invented a type of microscope that allows visualisation of reactions at the atomic scale. She chose not to patent it so it could be easily used by others.



LESLEY YELLOWLEES
INORGANIC CHEMIST

The first female president of the Royal Society of Chemistry. Her research focuses on electron transfer reactions, solar energy, and EPR spectroscopy.



PAULA HAMMOND
CHEMICAL ENGINEER

Hammond's research focuses on nanoscale polymers for drug delivery and other applications. She co-founded the MIT Institute for Soldier Nanotechnology.

JACQUELINE BARTON
BIOPHYSICAL CHEMIST

Barton studies the chemical and physical properties of DNA, and the role of charge transport chemistry in DNA repair. She has received numerous awards for her work.

POLLY ARNOLD
ORGANOMETALLIC CHEMIST

Arnold's research focuses on synthetic chemistry and theories of bonding and reactivity, with the aim of understanding the behaviour of nuclear waste.