

Lise

Meitner

1878 – 1968

What did she do?

Lise Meitner was an Austrian-Swedish physicist born in 1878, Austria. She studied her doctorate at the University of Vienna and became the second woman in the world to earn a doctorate in physics. She spent most of her scientific career in Germany where she was a professor of physics. She lost her position however, due to anti-Jewish Nazi laws and she fled to Sweden in 1938.

She worked with Otto Hahn on nuclear physics in the 1930s. The two of them were amongst the first to isolate an isotope of protactinium

and they named it protactinium-231. Hahn and his colleague Strassmann demonstrated that barium appears in neutron-bombarded uranium. Along with her nephew Otto Frisch, Meitner used this knowledge to explain the physical characteristics of this splitting process and named it fission. Less than a decade later this led to the first nuclear power plants.

Only Hahn was awarded the Nobel Prize for the discovery, which was an all too common injustice for women in science. However, years later the chemical element Meitnerium was named in her honour.

Something to think about...

What makes chemical elements different from each other?