

The German Marie Curie

Lise Meitner

[7 November 1878 - 27 October 1968]



Special Scientific Achievements

Discovery of *element 91 (protactinium)*.
International recognition for her
investigation of alpha-, beta- and
gamma-radiation and their core
processes.

Lise Meitner contributed significantly
to the discovery of nuclear fission.

1878 Lise Meitner is born in Vienna on November 7.

1892/1901 At 14, she is forced to end her schooling, as girls in Vienna are not permitted to attend high school. Nine years later, in 1901, she finally obtains her high-school degree as external pupil from a high school for boys.

1901 - 1906 She studies mathematics, physics and philosophy at the University of Vienna, where in 1906 she obtains her doctorate in physics, on the thermal conduction of inhomogenous bodies.

1907 Lise Meitner goes to Berlin, where she attends lectures by Max Planck – secretly, as women are not yet permitted to register for lectures in Prussia. Her work quickly leads her to Otto Hahn and the chemistry institute at which he works. As a woman, her access to the fundamental workspaces there is restricted.

1909 - 1912 She collaborates with Otto Hahn on the elements and radioactivity at the *Kaiser-Wilhelm-Society Institute of Chemistry*. Lise Meitner must perform her activities as an unpaid “visitor”.

1912 She becomes the first woman to receive a position at the University of Berlin, as assistant to Max Planck.

1913 Appointed as a scientific member of the *Kaiser-Wilhelm-Institut*.

1918 Lise Meitner and Otto Hahn discover the element 91 and call it protactinium. Through this achievement, she earns the long-deserved appointment as Head of an own Physics Department at the *Kaiser-Wilhelm-Institut*.

1922 Lise Meitner establishes herself as the first woman of physics. In the following four years she becomes a distinguished professor.



1933 As a result of her Jewish ancestry, her permission to teach is revoked. She continues work with powerful determination.

1938 She escapes to Sweden. Otto Hahn and Fritz Straßmann discover the nuclear fission of uranium and thorium the same year, to which Meitner had made a considerable contribution. One year later, she and her nephew Otto Robert Frisch deliver the first theoretical interpretation of nuclear fission.

1944 Only Otto Hahn was awarded the Nobel Prize for the discovery of nuclear fission despite the fact that both Lise Meitner and Otto Robert Frisch made a decisive contribution to the discovery. Otto Hahn was able to receive the prize not until the end of the war in 1945. Small comfort for the disappointed Meitner: she is selected by the American press as “Woman of the Year”.

1947 Research professor at the Technical University of Stockholm.

1955 - 1966 Lise Meitner receives numerous honors: in 1959, an Order of Merit and in 1966, together with Hahn and Straßmann, the *Enrico-Fermi Prize* of the US Atomic Energy Commission.

1968 Lise Meitner dies in Cambridge, where she has lived since 1964, on October 27.