

## Collector banknote

100th Anniversary of the Awarding of the Nobel Prize in Chemistry to Marie Skłodowska-Curie

NBP



"I discovered radium,
I did not create it,
so it does not belong to me,
it belongs to all humanity."

Manya Sitsodnoska Curia

To celebrate the 100th anniversary of the awarding of the Nobel Prize in chemistry to Marie Skłodowska-Curie the National Bank of Poland has issued a collector banknote of the face value of 20 złoty. The banknote was put into circulation on 25 November 2011.



Marie Skłodowska-Curie (1867–1934) – a Polish-French scientist and a two-time laureate of the Nobel Prize, discovered the polonium and radium radioactive elements, and introduced the concept of radioactivity. She was born in Warsaw at 16 Freta Street in the New Town (Nowe Miasto) district on 7 November 1867. The house where she was born is currently the seat of Marie Skłodowska-Curie museum and the Polish Chemical Society, of which Skłodowska-Curie held an honorary membership.

She was descended from a learned Polish intelligentsia family with strong patriotic traditions, which derived from two noble families – of the Topór (the Boguski bloodline) and of the Dołęga (the Skłodowski bloodline) clans. Raised with respect for science and scientific achievement, she received a sound education, which made it possible for her to take up studies at the Sorbonne in Paris. She was a person of many talents and was fluent in several languages. Yet Skłodowska took a special interest in the exact sciences, staying under a strong intellectual influence of her father and the then prevailing Positivist ideology. Having graduated from the Third Government Gymnasium for Girls in Warsaw with a gold medal, which qualified her

to pursue university education, she started to work as a governess to earn money for tuition fees at the Parisian Sorbonne she dreamt of so much. In the end of the nineteenth century, in the dark days of Poland's partition by the neighbouring empires, no university in the occupied territories would offer education to talented women, which forced them to leave the country if they wished to advance learning. Before leaving Warsaw, however, Skłodowska had a chance to work at a chemical laboratory, which confirmed her choice of the area of interest. In the chemical laboratory of the Warsaw Museum of Industry and Agriculture, under supervision of Professor Napoleon Milicer and doctor Władysław Kossakowski, Marie conducted experiments in the field of chemical analysis. Years later she admitted that hadn't she learned proper chemical analysis while at Warsaw she would not have isolated radium. Passion, perseverance, love of knowledge and trust in the beauty of science led Marie Skłodowska to study at the Sorbonne, where she graduated coming first in physics and second in mathematics. Hard work at a laboratory then won Skłodowska highest respect and scientific honours as well as university assignments.

In 1895, Marie married a French physicist, Pierre Curie, and embraced French citizenship. She would then bear the double-barreled surname Marie Skłodowska-Curie (though following the French custom she would sign herself Marie

Curie-Skłodowska, M.Curie or Madame Pierre Curie). The couple would sign together all scientific work they published in specialist periodicals or the communiqués they sent to the French Academy of Sciences, thereby confirming equal share of each spouse in the scientific work. In 1903 Marie Skłodowska-Curie, as the first woman in history, received the Nobel Prize. The prize was awarded to Marie and Pierre Curie and the French physicist Henri Becquerel for discovering the phenomenon of radioactivity.

## MARIE SKŁODOWSKA-CURIE BLAZED A TRAIL IN A NUMBER OF AREAS

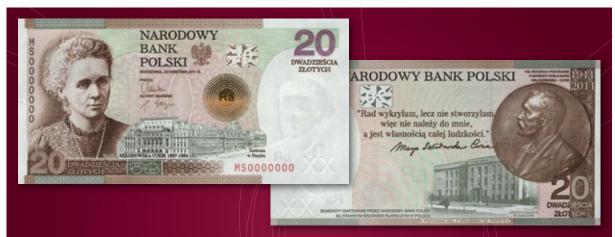
She was the first female student to have graduated from the Faculty of Mathematical Sciences at the Sorbonne coming first in physics, and the first woman to get her Ph.D. there. In 1906, following the tragic death of Pierre Curie, Marie was the first woman allowed to hold a lecture at the Sorbonne. Two years later she became the first female professor at that university (a title held by no woman prior to her). Similarly, in 1911-1933 she was the only woman to participate at the Solvay Conferences – international meetings of the prominent physicists of her time. Finally, she was the only woman and the only

scientist to have received the Nobel Prize for the second time, and in another scientific discipline too. In 1911 Skłodowska was individually awarded the Nobel Prize in chemistry for the discovery of polonium and radium and the studies on isolation of radium in its metallic form.

Scientific research and discoveries by Marie Skłodowska-Curie revolutionised science and perception of the atom, paving the way to the development of contemporary physics and the emergence of new scientific disciplines, such as radiation chemistry or nuclear physics. Her works enabled the construction of nuclear reactors and power plants, and the discovery of radium and its application in medicine laid foundations to a new method of treatment of cancerous diseases – Curietherapy, and significant advancement in oncology.

Marie Skłodowska-Curie died in France on 4 July 1934. She was buried in the Curie family grave at the cemetery of Sceaux near Paris. In 1995, the remains of Marie and Pierre Curie were interred in the French Pantheon, next to France's other leading minds. Marie Skłodowska-Curie was the only woman to be honoured for her personal contribution to science in this way, and the only person born outside France laid to rest in the Pantheon.

Małgorzata Sobieszczak- Marciniak Director of the Museum of Marie Skłodowska-Curie Polish Chemical Society



The front of the banknote features an image of Marie Skłodowska-Curie and the shape of the building of the Sorbonne in Paris.

**The back** of the banknote depicts an image of the medal awarded to the Nobel Prize winners, a quotation from the speech by Maria Skłodowska-Curie on radium and the image of the seat of the Radium Institute in Warsaw.

Author of the design is Agnieszka Próchniak.

Author of the banknote's steel engraving matrix is Przemysław Krajewski.

Under the Ordinance No 27/2011 of the President of the National Bank of Poland of 15 November 2011, the banknote has been legal tender starting from 25 November 2011.

Volume: 60.000 pcs.

Dimensions: 138 x 69 mm



The National Bank of Poland holds the exclusive right to issue the currency of the Republic of Poland.

In addition to issuing **coins and banknotes of general circulation**, the NBP issues **collector coins and banknotes**.

The issue of collector items is designed both to commemorate events, anniversaries and well-known personalities and to disseminate knowledge about Polish culture, science and tradition.

All coins and banknotes issued by the NBP are legal tender in Poland.

Information on the issue schedule can be fund at: www.nbp.pl/banknoty website.

Collector banknotes issued by the NBP are sold in the Kolekcjoner service (Internet auction / Online shop) at the following website: www.kolekcjoner.nbp.pl and at the NBP regional branches.



The banknotes have been manufactured by the Polish Security Printing Works (PWPW S.A.).