The Nobel Prizes (/noʊˈbɛl/ noh-BEL; Swedish: Nobelpriset [nʊˈbɛ̂lːˌpriːsɛt]; Norwegian: Nobelprisen Norwegian: [nʊˈbɛ̀lːˌpriːsn̩] ⓘ) are five separate prizes that, according to the 1895 will of Alfred Nobel, a Swedish chemist, engineer, and industrialist who invented dynamite, are awarded to "those who, during the preceding year, have conferred the greatest benefit to humankind." Alfred Nobel died the following year, and prizes were first awarded in 1901.[2] A sixth prize, for Economic Sciences, established by the Bank of Sweden, is usually also included.

Nobel Prizes are awarded in the fields of Physics, Chemistry, Physiology or Medicine, Literature, and Peace. Nobel characterises the Peace Prize as "to the person who has done the most or best to advance fellowship among nations, the abolition or reduction of standing armies, and the establishment and promotion of peace congresses".[2]

In 1968, Sweden's central bank, Sveriges Riksbank, funded the establishment of the Prize in Economic Sciences in memory of Alfred Nobel, to also be administered by the Nobel Foundation.[2][4][5] Nobel Prizes are widely regarded as the most prestigious awards available in their respective fields.[6][7]

The prize ceremonies take place annually. Each recipient, known as a laureate, receives a green gold medal plated with 24 karat gold, a diploma, and a monetary award. As of 2023, the Nobel Prize monetary award is 11,000,000 SEK. (1,061,846 USD)[3] A prize may not be shared among more than three individuals, although the Nobel Peace Prize can be awarded to organisations of more than three people.[8] Nobel Prizes are not awarded posthumously, but if a person is awarded a prize and dies before receiving it, the prize is presented.[9]

The Nobel Prizes, beginning in 1901, and the Nobel Memorial Prize in Economic Sciences, beginning in 1969, have been awarded 609 times to 975 people and 25 organisations. Five individuals and two organisations have received more than one Nobel Prize.[10]

History

A black and white photo of a bearded man in his fifties sitting in a chair.

Alfred Nobel had the unpleasant surprise of reading his own obituary, which was titled "The Merchant of Death Is Dead", in a French newspaper.

Alfred Nobel was born on 21 October 1833 in Stockholm, Sweden, into a family of engineers.[11] He was a chemist, engineer, and inventor. In 1894, Nobel purchased the Bofors iron and steel mill, which he made into a major armaments manufacturer. Nobel also invented ballistite. This invention was a precursor to many smokeless military explosives, especially the British smokeless powder cordite. As a consequence of his patent claims, Nobel was eventually involved in a patent infringement lawsuit over cordite. Nobel amassed a fortune during his lifetime, with most of his wealth coming from his 355 inventions, of which dynamite is the most famous.[12]

There is a popular story about how, in 1888, Nobel was astonished to read his own obituary, titled "The Merchant of Death Is Dead", in a French newspaper. It was Alfred's brother Ludvig who had died; the obituary was eight years premature. The article disconcerted Nobel and made him apprehensive about how he would be remembered. This inspired him to change his will.[13] Historians have been unable to verify this story and some dismiss the story as a myth.[14][15] On 10 December 1896, Alfred Nobel died in his villa in San Remo, Italy, from a cerebral haemorrhage. He was 63 years old.[16]

Nobel wrote several wills during his lifetime. He composed the last over a year before he died, signing it at the Swedish–Norwegian Club in Paris on 27 November 1895.[17][18] To widespread astonishment, Nobel's last will specified that his fortune be used to create a series of prizes for those who confer the "greatest benefit on mankind" in physics, chemistry, physiology or medicine, literature, and peace.[19] Nobel bequeathed 94% of his total assets, 31 million SEK (c. US$186 million, €150 million in 2008), to establish the five Nobel Prizes.[20][21] Owing to skepticism surrounding the will, it was not approved by the Storting in Norway until 26 April 1897.[22] The executors of the will, Ragnar Sohlman and Rudolf Lilljequist, formed the Nobel Foundation to take care of the fortune and to organise the awarding of prizes.[23]

Nobel's instructions named a Norwegian Nobel Committee to award the Peace Prize, the members of whom were appointed shortly after the will was approved in April 1897. Soon thereafter, the other prize-awarding organisations were designated. These were Karolinska Institute on 7 June, the Swedish Academy on 9 June, and the Royal Swedish Academy of Sciences on 11 June.[24] The Nobel Foundation reached an agreement on guidelines for how the prizes should be awarded; and, in 1900, the Nobel Foundation's newly created statutes were promulgated by King Oscar II.[19] In 1905, the personal union between Sweden and Norway was dissolved.

Nobel Foundation

Formation of Foundation

Main article: Nobel Foundation

A paper with stylish handwriting on it with the title "Testament"

Alfred Nobel's will, which stated that 94% of his total assets should be used to establish the Nobel Prizes

According to his will and testament read in Stockholm on 30 December 1896, a foundation established by Alfred Nobel would reward those who serve humanity. The Nobel Prize was funded by Alfred Nobel's personal fortune. According to the official sources, Alfred Nobel bequeathed most of his fortune to the Nobel Foundation that now forms the economic base of the Nobel Prize.[25]

The Nobel Foundation was founded as a private organisation on 29 June 1900. Its function is to manage the finances and administration of the Nobel Prizes.[26] In accordance with Nobel's will, the primary task of the foundation is to manage the fortune Nobel left. Robert and Ludvig Nobel were involved in the oil business in Azerbaijan, and according to Swedish historian E. Bargengren, who accessed the Nobel family archive, it was this "decision to allow withdrawal of Alfred's money from Baku that became the decisive factor that enabled the Nobel Prizes to be established".[27] Another important task of the Nobel Foundation is to market the prizes internationally and to oversee informal administration related to the prizes. The foundation is not involved in the process of selecting the Nobel laureates.[28][29] In many ways, the Nobel Foundation is similar to an investment company, in that it invests Nobel's money to create a solid funding base for the prizes and the administrative activities. The Nobel Foundation is exempt from all taxes in Sweden (since 1946) and from investment taxes in the United States (since 1953).[30] Since the 1980s, the foundation's investments have become more profitable and as of 31 December 2007, the assets controlled by the Nobel Foundation amounted to 3.628 billion Swedish kronor (c. US$560 million).[31]

According to the statutes, the foundation consists of a board of five Swedish or Norwegian citizens, with its seat in Stockholm. The chairman of the board is appointed by the Swedish King in Council, with the other four members appointed by the trustees of the prize-awarding institutions. An Executive director is chosen from among the board members, a deputy director is appointed by the King in Council, and two deputies are appointed by the trustees. However, since 1995, all the members of the board have been chosen by the trustees, and the executive director and the deputy director appointed by the board itself. As well as the board, the Nobel Foundation is made up of the prize-awarding institutions (the Royal Swedish Academy of Sciences, the Nobel Assembly at Karolinska Institute, the Swedish Academy, and the Norwegian Nobel Committee), the trustees of these institutions, and auditors.[31]

Foundation capital and cost

The capital of the Nobel Foundation today is invested 50% in shares, 20% bonds and 30% other investments (e.g. hedge funds or real estate). The distribution can vary by 10 percent.[32] At the beginning of 2008, 64% of the funds were invested mainly in American and European stocks, 20% in bonds, plus 12% in real estate and hedge funds.[33]

In 2011, the total annual cost was approximately 120 million kronor, with 50 million kronor as the prize money. Further costs to pay institutions and persons engaged in giving the prizes were 27.4 million kronor. The events during the Nobel week in Stockholm and Oslo cost 20.2 million kronor. The administration, Nobel symposium, and similar items had costs of 22.4 million kronor. The cost of the Economic Sciences prize of 16.5 Million kronor is paid by the Sveriges Riksbank.[32]

Inaugural Nobel prizes

A black and white photo of a bearded man in his fifties sitting in a chair.

Wilhelm Röntgen, who received the first Nobel Prize in Physics for his discovery of the X-ray

Once the Nobel Foundation and its guidelines were in place, the Nobel Committees began collecting nominations for the inaugural prizes. Subsequently, they sent a list of preliminary candidates to the prize-awarding institutions.

The Nobel Committee's Physics Prize shortlist cited Wilhelm Röntgen's discovery of X-rays and Philipp Lenard's work on cathode rays. The Academy of Sciences selected Röntgen for the prize.[34][35] In the last decades of the 19th century, many chemists had made significant contributions. Thus, with the Chemistry Prize, the academy "was chiefly faced with merely deciding the order in which these scientists should be awarded the prize".[36] The academy received 20 nominations, eleven of them for Jacobus van 't Hoff.[37] Van 't Hoff was awarded the prize for his contributions in chemical thermodynamics.[38][39]

The Swedish Academy chose the poet Sully Prudhomme for the first Nobel Prize in Literature. A group including 42 Swedish writers, artists, and literary critics protested against this decision, having expected Leo Tolstoy to be awarded.[40] Some, including Burton Feldman, have criticised this prize because they consider Prudhomme a mediocre poet. Feldman's explanation is that most of the academy members preferred Victorian literature and thus selected a Victorian poet.[41] The first Physiology or Medicine Prize went to the German physiologist and microbiologist Emil von Behring. During the 1890s, von Behring developed an antitoxin to treat diphtheria, which until then had been causing thousands of deaths each year.[42][43]

The first Nobel Peace Prize went to the Swiss Jean Henri Dunant for his role in founding the International Red Cross Movement and initiating the Geneva Convention, and jointly given to French pacifist Frédéric Passy, founder of the Peace League and active with Dunant in the Alliance for Order and Civilization.

Second World War

In 1938 and 1939, Adolf Hitler's Third Reich forbade three laureates from Germany (Richard Kuhn, Adolf Friedrich Johann Butenandt, and Gerhard Domagk) from accepting their prizes.[44] They were all later able to receive the diploma and medal.[45] Even though Sweden was officially neutral during the Second World War, the prizes were awarded irregularly. In 1939, the Peace Prize was not awarded. No prize was awarded in any category from 1940 to 1942, due to the occupation of Norway by Germany. In the subsequent year, all prizes were awarded except those for literature and peace.[46]

During the occupation of Norway, three members of the Norwegian Nobel Committee fled into exile. The remaining members escaped persecution from the Germans when the Nobel Foundation stated that the committee building in Oslo was Swedish property. Thus it was a safe haven from the German military, which was not at war with Sweden.[47] These members kept the work of the committee going, but did not award any prizes. In 1944, the Nobel Foundation, together with the three members in exile, made sure that nominations were submitted for the Peace Prize and that the prize could be awarded once again.[44]

Prize in Economic Sciences

Main article: Nobel Memorial Prize in Economic Sciences

Map of Nobel laureates by country

In 1968, Sweden's central bank Sveriges Riksbank celebrated its 300th anniversary by donating a large sum of money to the Nobel Foundation to be used to set up a prize in honour of Alfred Nobel. The following year, the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was awarded for the first time. The Royal Swedish Academy of Sciences became responsible for selecting laureates. The first laureates for the Economics Prize were Jan Tinbergen and Ragnar Frisch "for having developed and applied dynamic models for the analysis of economic processes".[48][49] The board of the Nobel Foundation decided that after this addition, it would allow no further new prizes.[50]

Award process

The award process is similar for all of the Nobel Prizes, the main difference being who can make nominations for each of them.[51]

Duration: 48 seconds.0:48

The 2009 announcement of the laureates in Nobel Prize in Chemistry by Gunnar Öquist, permanent secretary of the Royal Swedish Academy of Sciences

Duration: 1 minute and 51 seconds.1:51

The 2009 Nobel Prize in Literature announcement by Peter Englund in Swedish, English, and German

Nominations

Nomination forms are sent by the Nobel Committee to about 3,000 individuals, usually in September the year before the prizes are awarded. These individuals are generally prominent academics working in a relevant area. Regarding the Peace Prize, inquiries are also sent to governments, former Peace Prize laureates, and current or former members of the Norwegian Nobel Committee. The deadline for the return of the nomination forms is 31 January of the year of the award.[51][52] The Nobel Committee nominates about 300 potential laureates from these forms and additional names.[53] The nominees are not publicly named, nor are they told that they are being considered for the prize. All nomination records for a prize are sealed for 50 years from the awarding of the prize.[54][55]