



ELSEVIER

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May

MAY SCIENTIST

- 1 Williamson, Alexander William** (1 May 1824–6 May 1904), British scientist. He was the first to clearly demonstrate that catalytic action is achieved by the formation of an intermediate compound. He was also the first to produce ether, where the oxygen atom is attached to two hydrocarbon groups.
- Balmer, Johann Jakob** (1 May 1825–12 March 1898), Swiss scientist. He empirically discovered the four wavelengths observed in the visible spectrum of hydrogen, the Balmer series, which can be expressed by the Balmer formula.
- 2 Gorie, Dominic Lee Pudwill** (2 May 1957), American astronaut. He made several flights of scientific interest between 1998 and 2008.
- 3 Hackspill, Louis** (3 May 1880–8 October 1963), French scientist. He had an indispensable involvement in the research into alkali and alkaline-earth metals.
- Volmer, Max** (3 May 1885–3 June 1965), German scientist. He developed the Stern–Volmer equation for the intensity of fluorescent light, which governs the kinetics of a photochemical intermolecular deactivation mechanism. He developed the mercury vapor jet pump.
- Thomson, George Paget** (3 May 1892–10 September 1975), British scientist. He discovered electron diffraction by crystals. For this discovery, he and C. Joseph received the Nobel Prize in physics in 1937.
- Mark, Herman Francis** (3 May 1895–6 April 1992), American–Austrian scientist. He determined the structures of cellulose, silk and rubber. In collaboration with other researchers, he developed micellar theory.
- Kastler, Alfred** (3 May 1902–7 January 1984), French scientist. The invention of the technique of optical pumping opened the door to the creation of gas and solid-state lasers, which are essential in today's world in areas ranging from microsurgery to telecommunications. He was awarded the Nobel Prize in physics in 1966.
- Nicolescu, Ioan V.** (3 May 1911), Romanian scientist. He is known for his outstanding research activities in the field of hydrocarbons and heterogeneous catalysis. He developed an original method for the synthesis of aromatic hydrocarbons.
- Weinberg, Steven** (3 May 1933), American scientist. He, A. Salam and S. Glashow are co-winners of the 1979 Nobel Prize in physics for the theory of the weak and electromagnetic interaction between elementary particles.
- 4 Thénard, Louis Jacques** (4 May 1777–21 June 1857), French scientist. He was responsible for the discovery of cobalt blue, which is used to color porcelain. He also discovered boron, hydrogen peroxide, and silicon insulation. He developed a classification for metals.
- Somorjai, Gabor A.** (4 May 1935), American scientist of Hungarian origin. He studied elementary reaction steps, adsorption, surface diffusion, desorption, the electrical properties of surfaces, the uniqueness of the chemical bonds to surfaces, and the mechanical properties of the surfaces.

- 5 **Draper, John William** (5 May 1811–4 January 1882), Anglo-American scientist. He recognized that light caused chemical reactions via the absorption of light energy by molecules, beginning photochemistry. He took the first full-detail picture of the moon in 1840, which is the oldest existing photograph today.

Schawlow, Arthur Leonard (5 May 1921–28 April 1999), American scientist. He and N. Bloembergen are co-winners of the 1981 Nobel Prize in physics for their important contribution to the development of laser spectroscopy.

- 6 **Grignard, François Auguste Victor** (6 May 1871–13 December 1935), French scientist. He is credited for his contribution of organomagnesium compounds in organic synthesis. He received the 1912 Nobel Prize in chemistry for his discovery of the Grignard reagent, which resulted in significant progress in the field of organic chemistry.

Lauterbur, Paul Christian (6 May 1929–27 March 2007), American scientist. He is known for the idea of creating gradients in magnetic fields to help determine the origin of the radio waves emitted by the nuclei molecules. This spatial information is used to construct two-dimensional images. He received the 2003 Nobel Prize in physiology or medicine with P. Mansfield for the development of magnetic resonance imaging (MRI).

6 May 1889 – The Eiffel Tower was inaugurated. It is a stunning monument and the most admired part of the Universal Exhibition in Paris.

- 7 **Altman, Sidney** (7 May 1939), American scientist of Canadian origin. For the discovery of the catalytic properties of RNA, he received the Nobel Prize in chemistry in 1989 with T.R. Cech.
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- 8 **Brauner, Bohuslav** (8 May 1855–15 February 1935), Czech scientist. He is known for his research in the field of the chemistry of lanthanides.
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- 9 **Eigen, Manfred** (9 May 1927), German scientist. He was awarded the Nobel Prize in physics in 1967 with RGW Norrish and G. Porter for their studies of extremely fast chemical reactions.

Haiduc, Ionel (9 May 1937), Romanian Scientist. He is known for his research in coordination chemistry, the organometallic field of supramolecular chemistry, inorganic chemistry cycles, and the biological activity of metal compounds. He is noted for his pioneering studies in the field of organometallic chemistry.

Levitt, Michael (9 May 1947), American-Israeli-British scientist. He is a co-recipient of the Nobel Prize in chemistry in 2013 with Arieh Warshel Martin Karplus for the development of multiscale models for complex chemical systems. He was one of the first researchers to develop [molecular dynamics](#) simulations of DNA and proteins and developed the first [software](#) for this purpose.

- 10 **Fresnel, Augustin Jean** (10 May 1788–14 July 1827), French scientist. He is known as the discoverer of modern optics and for introducing the wave theory of light. He invented the lens and was the first to obtain circularly polarized light.

Schoenheimer, Rudolph (10 May 1898–11 September 1941), American-German scientist. He developed the biomolecule labeling isotope technique for the study of metabolism.

Smith, George Elwood (10 May 1930), American scientist. He is co-inventor of the semiconductor circuit imaging CCD, Charge-Coupled Device or CCD device. With W. Boyle, he was awarded the Nobel Prize in physics in 2009 for this invention.

- 11 **Sylvius, Franciscus** (11 May 1614–19 November 1672), Dutch scientist. He is considered a pioneer of modern clinical chemistry. Sylvius was the first to establish a direct link between lung nodules in TB and the disease. He discovered the tube between the third and fourth lobe of the brain, which is called the “aqueduct van Sylvius” in his honor.

von Karman, Theodore (11 May 1881–6 May 1963), American-Hungarian scientist. He analyzed the motion and turbulence of fluids and established the Aeronautics theory. He laid the foundation for the designs that led to supersonic flight.

Feynman, Richard Phillips (11 May 1918–15 February 1988), the American scientist to whom we owe the revision of quantum mechanics. For his work in relativistic quantum electrodynamics, quarks and superfluid helium, as well as his discoveries in particle physics, he is a co-winner of the Nobel Prize in Physics in 1965 with S.-I. Tomonaga and J. Schwinger. He was also interested in the popularization of science, the translation of Maya “hieroglyphs” and was an outstanding musician.

Hewish, Antony (11 May 1924), British astronomer. He is co-winner with Mr. Ryle of the 1974 Nobel Prize in physics for research into astrophysics radio pulsars (aperture synthesis in the case of Mr. Ryle).

- 12 von Liebig, Justus** (12 May 1803–18 April 1873), German scientist. He is known as the father of industrial agriculture. He discovered that sulfuric acid in the soil could increase the amount of phosphorus available to plants. He is credited with the theories of the carbon and nitrogen cycles.
- Giauque, William Francis** (12 May 1895–28 March 1982), American scientist of Canadian origin. He discovered that oxygen was a mixture of three isotopes and that oxygen-18 could be used as a radiotracer; he has been proven that the oxygen released during the photosynthesis of plants originated from water rather than from carbon dioxide. He was awarded the 1949 Nobel Prize in chemistry for his research in the field of chemical thermodynamics and the behavior of materials at low temperatures close to absolute zero.
- Sadron, Charles** (12 May 1902–5 September 1993), French scientist. His research covers the area of fluid mechanics, macromolecular chemistry, molecular biophysics, and biological macromolecules. He also designed a flow birefringence device. Sadron founded one of the largest research macromolecule centers in Strasbourg, which bears his name today.
- Hodgkin, Dorothy Mary Crowfoot** (12 May 1910–29 July 1994), British scientist. For her work in the field of crystallography, especially for the use of X-ray diffraction to determine the structures of biochemical substances, she won the Nobel Prize in chemistry in 1964.
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- 13 Wu, Chien-Shiung** (13 May 1912–16 February 1997), Chinese-American scientist. She is known for her research in the field of nuclear physics for the enrichment of uranium.
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- 14 Steinitz, Wilhelm** (14 May 1836–12 August 1900), Austro-American chess player. He is considered the father of modern chess. He is the first official world chess champion.
- Tvet, Mihail Semenovici** (14 May 1872–26 June 1919), Russian scientist. He studied plant pigments, and in 1906, he performed the first chromatographic analysis.
- Auger, Pierre Victor** (14 May 1899–24 December 1993), French scientist. He is known for his research in the field of atomic physics and nuclear physics on cosmic rays. The Auger effect is of significant importance in the manufacturing process of electronic components.
- 14 May 1973** – The first space station, *Skylab*, was launched.
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- 15 Curie, Pierre** (15 May 1859–19 April 1906), French scientist. With Marie Skłodowska-Curie, he discovered the two radioactive elements polonium and radium. He discovered that there are at least three types of radiation, alpha, beta, gamma, and the scientific world realized the dangers of radioactivity. He and Marie Curie received the Nobel Prize in physics in 1903 for their research on radiation phenomena.
- Hume-Rothery, William** (15 May 1899–27 September 1968), British metallurgist. His studies focused on the study of iron, silver and copper alloys, taking into account the interstitial substitutions or alloys and the proportions of these two regimes. He followed the changes produced in the metal atoms of one network, when a metal is dissolved in another.
- Wilczek, Frank** (15 May 1951), American scientist. For the discovery of asymptotic freedom in the theory of the strong interaction, he, H. D. Politzer and D. Gross received the Nobel Prize in physics in 2004.
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- 16 Vauquelin, Louis-Nicolas** (16 May 1763–14 November 1829), French scientist. He discovered chromium and recognized the existence of beryllium in the stones beryl and emerald, even if it was not isolated. He isolated the compound asparagine from asparagus. He discovered pectin and malic acid in apples and isolated camphoric acid and quinic acid.
- Bednorz, Johannes Georg** (16 May 1950), German scientist. For his research on high-temperature superconductors, he is a co-winner with Bednorz of the 1987 Nobel Prize in physics.
- Roux, Didier** (16 May 1955), French scientist. He is known for his fundamental research in the fields of micelles and microemulsions.
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- 17 Lockyer, Joseph Norman** (17 May 1836–16 August 1920), British scientist. With J. Janssen, he is known for the discovery of helium (He), which is in reference to the Greek name for the sun. He is also known as the founder of the journal *Nature*.
- Hassel, Odd** (17 May 1897–11 May 1981), Norwegian scientist. For his fundamental research on the development of the concept of conformation and its application in chemistry, he is co-winner with DHR Barton of the 1969 Nobel Prize in chemistry.
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18 Midgley Jr., Thomas (18 May 1889–2 November 1944), American scientist. He is known for the production of Freon (chlorofluorocarbons – CFCs) and tetraethyl lead (fuel additive) in 1930. Subsequently, these two products have proved seriously harmful to the environment.

du Vigneaud, Vincent (18 May 1901–11 December 1978), American-French scientist. For his work on biochemical compounds based on sulfur, especially for the first synthesis of a polypeptide hormone, he was awarded the Nobel Prize in chemistry in 1955.

Grünberg, Peter (18 May 1939), German scientist. For the discovery of giant magnetoresistance, he is co-winner, with A. Fert, of the Nobel Prize in physics in 2007.

19 Walker, John (19 May 1781–1 May 1859), English scientist. In 1826, he invented (by chance) matches by mixing potash with antimony.

Perutz, Max Ferdinand (19 May 1914–6 February 2002), English-Austrian scientist. For his work on the structure of globular protein, he and J. C. Kendrew received the Nobel Prize in chemistry in 1962.

20 Buchner, Eduard (20 May 1860–13 August 1917), German scientist. He demonstrated that the presence of living cells in yeast was not necessary for fermentation. For his research in the field of biochemistry and the discovery of cell-free fermentation, he was awarded the Nobel Prize in chemistry in 1907.

Matei, Ilie (20 May 1895–31 March 1969), Romanian scientist. He is known for his fundamental research in the chemistry of carbonyl derivatives. He studied etheric oils from the leaves of conifers and achieved the synthesis of polyurethane rubber.

20 May 1919 – Einstein's theory of relativity is proven by Arthur Eddington.

21 Einthoven, Willem (21 May 1860–29 September 1927), Dutch scientist. He was awarded the Nobel Prize in physiology or medicine in 1924 for the discovery of the electrocardiogram mechanism.

22 Kuhlmann, Charles Frédéric (22 May 1803–27 January 1881), French scientist. He discovered the preparation of nitric acid via the catalytic oxidation of ammonia in the presence of a platinum catalyst. However, using this method, the German chemist Wilhelm manufactured small-scale nitric acid. Nevertheless, when the German chemist Carl Bosch replaced another platinum catalyst with iron, manganese and bismuth, the manufacture of nitric acid could be performed at an industrial scale. The manufactured nitrates that arose were substituted for natural nitrates from Chile.

Brown, Herbert Charles (22 May 1912–19 December 2004), American scientist. He developed quantitative methods for the study of organic compounds. He is a co-inventor of sodium borohydride and other reducing agents used in the pharmaceutical industry. He and G. Wittig received the Nobel Prize in chemistry in 1979—Brown for his work on boranes and Wittig for the Wittig reaction.

Olah, George Andrew (22 May 1927), American scientist of Hungarian origin. For his studies on carbonation chemistry, the 1994 Nobel Prize in chemistry was awarded to him.

23 Jolibois, Médard Pierre (23 May 1884–9 February 1954), French scientist. He studied allotropes of phosphorus, which led him to the discovery of pyrophoric phosphorus and arsenic allotropy. He was responsible for the study of organometallic derivatives, plaster and chemical actions due to electric sparks, as well as work on electrolysis in aqueous solution and preparing oxides via electrolysis.

Bardeen, John (23 May 1908–30 January 1991), American scientist. He received two Nobel Prizes in physics. He is co-laureate with WS Hockley and WH Brattain of the 1956 Nobel Prize in physics for their work on semiconductors in 1948, i.e., creating the first germanium transistor. For his work on superconductivity (proposed in 1957), he is also a co-winner with LN Cooper and JR Schrieffer of the Nobel Prize in physics in 1972.

Wiegand, Clyde (23 May 1915–5 July 1996), American scientist. He is known for the discovery of the antiproton. He worked on magnetic materials and developed an original metallurgical structure, which is responsible for an interesting effect that bears his name and whose application in the field of sensors is widespread (see Wiegand effect).

Segal, Eugen (23 May 1933–9 October 2013), Romanian scientist. He made important contributions in the fields of physical chemistry, adsorption and catalysis.

- 24 Fahrenheit, Daniel Gabriel** (24 May 1686–16 September 1736), German scientist. He was responsible for the discovery of the hydrometer, hygrometer and thermometer to which he gave his name. He is the creator of the temperature scale that bears his names.
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- 24 May 1543** – Copernicus proved that the Earth and planets revolved around the sun.
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- 24 May 1844** – The inventor Samuel Morse sent the first message via telegraph line.
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- 25 Zeeman, Pieter** (25 May 1865–9 October 1943), Dutch physicist. He is known for the discovery of the Zeeman effect. For his research on the influence of magnetism on radiation, he is co-winner with H. Lorentz of the Nobel Prize in physics in 1902.
- Wagner, Carl** (25 May 1901–10 December 1977), German scientist to whom we owe an important oxidation kinetics law, which he formulated in 1933.
- Steinberger, Jack** (25 May 1921), American scientist. For the neutrino beam method and the demonstration of the doublet structure of leptons via the discovery of the muon neutrino, he received the Nobel Prize in physics in 1988 with M. Schwartz and L. Lederman.
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- 26 Ride, Sally Kristen** (26 May 1951–23 July 2012), American astrophysicist and astronaut. She was the first woman in space in 1983.
- 26 May 1908** - the discovery of oil in Persia (now Iran) had a large impact on the global economy.
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- 27 Nilson, Lars Fredrik** (27 May 1840 - 14 May 1899), Swedish scientist. He was responsible for the discovery of scandium and thorium.
- Curtius, Julius Wilhelm Theodor** (27 May 1857–8 February 1928), German scientist. He is known primarily as the discoverer of hydrazine in 1887 and hydrazoic acid in 1890. He also prepared methyl hydrazine as a fuel for rockets.
- Fajans, Kazimierz** (27 May 1887–18 May 1975), American scientist of Polish origin. His research activities cover the areas of physical chemistry, electrochemistry, photochemistry, crystallography, radionuclides and radioactive isotopes. He studied chemical bonds on adsorption indicators and the optical properties of substances.
- Cockroft, John Douglas** (27 May 1897–18 September 1967), English scientist. He and E. Walton received the 1951 Nobel Prize in physics for their research on the transmutation of atomic nuclei.
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- 28 Tammann, Gustrav** (28 May 1861–17 December 1938), Russian scientist. He studied the nature of chemical bonds and developed the theory of valence electrons, making a large contribution to the theoretical study of metallic bonds.
- 28 May 1910** – Halley's Comet passed. This comet is the best known and is one of the few comets that bears a name other than that of its discoverer. Halley (Edmund Halley), a British astronomer, determined the periodicity of the comet since 1682 as approximately 76 years.
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- 29 Braconnot, Henri** (29 May 1780–15 January 1855), French scientist. He discovered fumaric acid, aconitic nanceique, ellagic, pectic, pyrogallol, stearin, the stearic candle, and wood sugar.
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- 30 Alfvén, Hannes Olof Gösta** (30 May 1908–2 April 1995), Swedish astrophysicist. He became interested in studies on the movement of charged particles. He was awarded the Nobel Prize in physics in 1970 for his fundamental work and discoveries in magneto-hydrodynamics, which have applications in various branches of plasma physics.
- Kobilka, Brian** (30 May 1955), American scientist. He is a co-winner of the Nobel Prize in chemistry in 2012 with Robert Lefkowitz for his work on G2 protein-coupled receptors.
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- 31 Schrieffer, John Robert** (31 May 1931), American scientist. He is a co-winner with L.N. Cooper and J. Bardeen of the 1972 Nobel Prize in physics for their research on superconductivity.
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